MITSUBISHI ELECTRIC
DIGITAL TELEVISIONS™

Owner's Guide

Mitsubishi Plasma TV PD-4225S

Technically Anything is Possible®

Warning

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

WARNING:
TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING:
TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

NOTE TO CABLE/TV INSTALLER:
This reminder is provided to call the CATV system installer's attention to Article 820-40 of the National Electric Code (U.S.A.). The code provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of the cable entry as practical.

REGULATORY INFORMATION
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CAUTION:
Do not attempt to modify this product in any way without written authorization from Mitsubishi Digital Electronics America. Unauthorized modification could void the user's authority to operate this product.

COMPLIANCE:
The responsible party for this product's compliance is:
Mitsubishi Digital Electronics America
9351 Jeronimo Road
Irvine, CA 92618
Phone: (949) 465-6000

Safety Instructions

Important safeguards for you and your new product

Your product has been manufactured and tested with your safety in mind. However, improper use can result in potential electrical shock or fire hazards. To avoid defeating the safeguards that have been built into your new product, please read and observe the following safety points when installing and using your new product, and save them for future reference.

Observing the simple precautions discussed in this booklet can help you get many years of enjoyment and safe operation that are built into your new product.

This product complies with all applicable U.S. Federal safety requirements, and those of the Canadian Standards Association.

1. Read Instructions
All the safety and operating instructions should be read before the product is operated.

2. Follow Instructions
All operating and use instructions should be followed.

3. Retain Instructions
The safety and operating instructions should be retained for future reference.

4. Heed Warnings
All warnings on the product and in the operating instructions should be adhered to.

5. Cleaning
Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning. (See Page 8, Cleaning Safeguards)

6. Water and Moisture
Do not use this product near water, for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.

7. Accessories, Carts, and Stands
Do not place this product on a slippery or tilted surface, or on an unstable cart, stand, tripod, bracket, or table. The product may slide or fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

8. Transporting Product
A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

PORTABLE CART WARNING

9. Attachments
Do not use attachments not recommended by the product manufacturer as they may cause hazards.

10. Ventilation
Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

11. Power Sources
This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.

12. Power-Cord Polarization
This product is equipped with a three-wire grounding type plug, a plug having a third (grounding) pin. This plug will only fit into the grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.

13. Power-Cord Protection
Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.
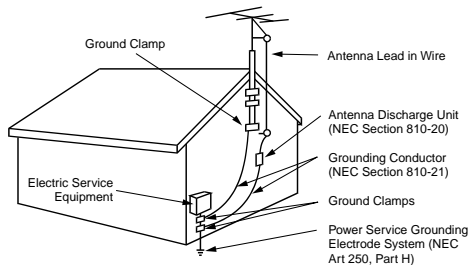
Safety Instructions continued

14. Outdoor Antenna Grounding

If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code (U.S.A.), ANSI/ NFPA 70 provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

Example of Grounding According to National Electrical Code Instructions

Ground Clamp
Antenna Lead in Wire
Antenna Discharge Unit (NEC Section 810-20)
Grounding Conductor (NEC Section 810-21)
Electric Service Equipment
Ground Clamps
Power Service Grounding Electrode System (NEC Art 250, Part H)

NEC - National Electrical Code

15. Lightning

For added protection for this product (receiver) during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

16. Power Lines

An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

17. Overloading

Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

18. Object and Liquid Entry

Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

19. Servicing

Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

20. Damage Requiring Service

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
a. If the power-supply cord or plug is damaged.
b. If liquid has been spilled, or objects have fallen into the product.
c. If the product has been exposed to rain or water.
d. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
e. If the product has been dropped or the cabinet has been damaged.
f. If the product exhibits a distinct change in performance.

21. Replacement Parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

22. Safety Check

Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

23. Wall or Ceiling Mounting

The product should be mounted to a wall or ceiling only as recommended by the manufacturer. The product may slide or fall, causing serious injury to a child or adult, and serious damage to the product.

24. Heat

The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

Important Information

PRECAUTIONS

Please read this manual carefully before using your Mitsubishi plasma TV and keep the manual handy for future reference.

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol warns the user that uninsulated voltage within the unit may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any part inside of this unit.

This symbol alerts the user that important literature concerning the operation and maintenance of this unit has been included. Therefore, it should be read carefully in order to avoid any problems.

WARNING

TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE. ALSO DO NOT USE THIS UNIT'S POLARIZED PLUG WITH AN EXTENSION CORD RECEPTACLE OR OTHER OUTLETS, UNLESS THE PRONGS CAN BE FULLY INSERTED. REFRAIN FROM OPENING THE CABINET AS THERE ARE HIGH-VOLTAGE COMPONENTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

WARNINGS AND SAFETY PRECAUTIONS

The Mitsubishi plasma TV is designed and manufactured to provide long, trouble-free service. No maintenance other than cleaning is required. Use a soft dry cloth to clean the panel. Never use solvents such as alcohol or thinner to clean the panel surface.

The plasma display consists of fine picture elements (cells). Although Mitsubishi utilizes plasma display panels with more than 99.99 percent active cells, there may be some cells that do not produce light or remain lit.

For operating safety and to avoid damage to the unit, please read and observe the following instructions.
To avoid shock and fire hazards:

1. Provide adequate space for ventilation to avoid internal heat build-up. Do not cover rear vents or install the unit in a closed cabinet or shelves. The unit is equipped with cooling fans. If you install the unit in an enclosure, make sure there is adequate space at the top of the unit to allow hot air to rise and escape. If this happens, turn off the power to the monitor and unplug the power cord. If the room where the monitor is installed is particularly hot, move the monitor to a cooler location, and wait for the monitor to cool for 60 minutes. If the problem persists, contact your Mitsubishi dealer for service.

2. Do not use the power cord polarized plug with extension cords or outlets unless the prongs can be completely inserted.

3. Do not expose the unit to water or moisture.

4. Avoid damage to the power cord, and do not attempt to modify the power cord.

5. Unplug the unit during electrical storms or if the unit will not be used over a long period.

6. Do not open the cabinet which has potentially dangerous high voltage components inside. If the unit is damaged in this way the warranty will be void. Moreover, there is a serious risk of electric shock.

7. Do not attempt to service or repair the unit. Mitsubishi is not liable for any bodily harm or damage caused if unqualified persons attempt service or open the back cover. Refer all service to authorized Mitsubishi Service Centers.

CAUTION

PD-4225S can be used with the following optional accessories. Use with other optional accessories is capable of resulting in instability causing possible injury.

Manufacturer's name: MITSUBISHI DIGITAL ELECTRONICS AMERICA, INC
Stand: MB-4225
Speakers: MS-4225

Please contact MITSUBISHI DIGITAL ELECTRONICS AMERICA, INC for approved optional accessories.

To avoid damage and prolong operating life:

1. Use only with 120V 50/60Hz AC power supply. Continued operation at line voltages greater than 120 Volts AC will shorten the life of the unit, and might even cause a fire hazard.

2. Handle the unit carefully when installing it and do not drop.

3. Set the unit away from heat, excessive dust, and direct sunlight.

4. Protect the inside of the unit from liquids and small metal objects. In case of an accident, unplug the unit and have it serviced by an authorized Mitsubishi Service Center.

5. Do not hit or scratch the panel surface as this causes flaws on the surface of the screen.

6. For correct installation and mounting it is strongly recommended to use a trained, authorized Mitsubishi dealer.

7. Only use tabletop stands or wall-mount brackets that are designed specifically for this product.

8. As is the case with any phosphor-based display (like a CRT monitor, for example) light output will gradually decrease over the life of a Plasma Display Panel.

Recommendations to avoid or minimize uneven phosphor aging:

Like all phosphor-based display devices and all other gas plasma displays, plasma monitors can be susceptible to uneven phosphor aging under certain circumstances. Certain operating conditions, such as the continuous display of a static image over a prolonged period of time, can result in uneven phosphor aging if proper precautions are not taken. To protect your investment in this Mitsubishi plasma TV, please adhere to the following guidelines and recommendations for minimizing this type of damage:

*Do not turn off ORBITER.†

*Always enable and use your computer's, video game or DVD player screen saver during use with these sources.

*Display a moving image whenever possible.

*Change the position of the menu display from time to time.

*Always power down the monitor when you are finished using it.

If the plasma monitor is in long term use or continuous operation, take the following measures to reduce the likelihood of uneven phosphor aging:

*Do not turn off ORBITER.†

*Lower the Brightness and Contrast levels as much as possible without impairing image readability.

*Display an image with many colors and color gradations (i.e. photographic or photo-realistic images).

*Create image content with minimal contrast between light and dark areas. Use complementary or pastel colors whenever possible.

*Avoid displaying images with few colors and distinct, sharply defined borders between colors.

NOTE:
Uneven phosphor aging/burn-in is not covered by the warranty.

Contact Mitsubishi at 1-800-332-2119 for other recommended procedures that will best suit your particular application needs.

†ORBITER - Uneven phosphor aging/burn-in reduction feature. To minimize the risk of uneven phosphor aging/burn-in when displaying still images, the Mitsubishi PD-4225S offers a built-in feature known as ORBITER. The ORBITER feature intermittently shifts the screen image horizontally and vertically in small increments. This intermittent screen movement is usually not evident in full motion video. In some instances the ORBITER shift might be evident while displaying static guides or menus. The default setting for ORBITER is On. Mitsubishi chose this setting to help reduce uneven phosphor aging. Please do not shut the ORBITER off. For more information regarding ORBITER, see page 34.

WARNING: Do not leave stationary or letterbox images on-screen for extended periods of time. Mix types of pictures shown. Uneven phosphor aging is NOT covered by your warranty.

The normal use of a TV should include a mixture of TV picture types. The most frequently used picture types should fill the screen with constantly moving images rather than stationary images or patterns. Displaying the same stationary patterns over extended periods of time, or displaying the same stationary pattern frequently can leave a subtle but permanent ghost image. To avoid this, mix your viewing pattern. Do not show the same stationary image for more than 15% of your total TV viewing in any one week. Display constantly moving and changing images that fill the screen whenever possible.

This plasma TV is a phosphor-based display. As is the case with any phosphor-based display (like a CRT TV/monitor, for example) light output will gradually decrease over the life of a plasma display panel. Normal TV pictures fill the screen with constantly changing images. Under these conditions, phosphor-based displays age at an even rate across the entire screen. This maintains a TV picture that is evenly bright over the whole screen. Stationary images or images that only partially fill the screen (leaving black or colored bars to fill the screen), when used over extended periods of time or when viewed repeatedly, can cause uneven aging of the phosphors used in plasma displays and can leave subtle ghosts of the stationary images in the picture.

When using a computer or similar device through a VGA input, be sure to turn on the Screen Saver feature and set the activation time to 5 minutes or less. If your computer program allows, you should also set your toolbars to the hidden mode.

Still or stationary images may be received from broadcasters, cable channels, satellite channels, DVD discs, video tapes, laser discs, on-line services, web/internet searching devices, video games, and digital TV tuner/converter boxes. Examples of these types of images include, but are not limited to the following:

• **Letterbox top/bottom black bars:** shown at the top and bottom of the TV screen when you watch a widescreen (16:9) movie on a standard (4:3) TV.

• **Side bar images:** solid bars shown on each side of an image when watching a standard (4:3) program on a widescreen (16:9) TV.

• **Stock-market report bars:** ticker running at the bottom of the TV screen.

• **Shopping channel logos & pricing displays:** bright graphics that are shown constantly or repeatedly in the same location.

• **Video game patterns and scoreboards**

• **Bright station logos:** moving or low-contrast graphics are less likely to cause uneven aging of the picture tubes.

• **On-line (Internet) web sites:** or any other stationary or repetitive computer style images.

• **Closed Caption Backgrounds:** When set to black or bright color.

Cleaning Safeguards

Plasma TV Screen & Cabinet

Please follow the cleaning safeguards listed below to prevent damage to your Plasma TV and retain this document for future reference.

IMPORTANT: No Abrasives!

DO NOT use any kind of abrasive cloth or cleaner or ammonia on the Plasma TV's screen or cabinet.

Cleaning Your Plasma TV

Normally, light dusting with a dry, non-abrasive cloth will clean your Plasma TV. If cleaning beyond this is needed, please follow these guidelines:

First, turn off the Plasma TV and unplug the power cord from the wall outlet before cleaning.

Cleaning the cabinet of your Plasma TV

• Gently wipe down the Plasma TV with a soft, non-abrasive cloth such as cotton flannel or a clean cloth diaper, lightly moistened with water.

• Dry with a second dry, soft, non-abrasive cloth.

General Cleaning Warnings:

• **DO NOT** apply pressure to the Plasma TV's screen.

• **DO NOT** allow liquid to enter the Plasma TV through the ventilation slots or any crevice.

• **DO NOT** use any strong or abrasive cleaners because they can scratch the screen and the cabinet.

• **DO NOT** use any cleaners that contain ammonia, bleach, alcohol, benzene, or thinners because they can damage and dull the surfaces.

• **DO NOT** scrub or rub the screen or cabinet. Wipe it gently.

IMPORTANT

For further information, assistance in operating your Plasma TV or if you are in need of service, please contact us at www.mitsubishi-tv.com or call Consumer Relations at

800-332-2119

Introduction

What is a Plasma Display Panel (PDP)?

If voltage is applied to gas within glass panels, ultraviolet rays are produced and fused with a fluorescent substance. At that instant, light is emitted. A Plasma Display is a next generation flat display using this phenomenon.

160° - Wide angle range of vision

Your flat panel plasma TV offers an exceptionally broad viewing angle -- over 160 degrees. This means that the TV is clear and visible to viewers anywhere in the room.

Wide Screen

The 42" screen gives you a movie-theater experience in the comfort of your own home.

Multimedia

Connect your plasma TV to a PC and you can use it for conferencing, games, and internet browsing. The Picture-in-Picture feature allows you to view your PC and video images simultaneously.

Versatile

The light weight and thin size makes it easy to install your plasma display in a variety of locations where conventional TVs will not fit.

The PDP Manufacturing Process: Why minute colored dots may be present on the PDP screen

The plasma display panel consists of more than one million fine picture elements (cells). Although Mitsubishi utilizes plasma display panels with more than 99.99 percent active cells, there may be some cells that do not produce light or remain lit.

WARNING
TO REDUCE THE RISK OF FIRE AND ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

Contents

Setup and Operation Checklist

Setup and Operation Checklist
(See pages 23~27 for available connection and operational setup options.)

1. Unpack the TV and all accessories.
   See page 11.

2. Install Matching Stand
   See page 12.

3. Connect all external video and audio equipment.
   See pages 23 ~ 27.

4. Install batteries in remote control.
   See page 18.

5. Turn the TV on.
   See page 28.

6. Turn video source equipment on.

7. Select viewing source for the TV.
   See page 19.

8. Fine-tune source image and sound to personal preference
   or as required by source.
   See pages 30 ~ 31.

9. Additional features Setup
   See Contents above.

After reading this manual, keep it handy for future reference.

Installation

Ensure that the following accessories are included with your TV. If an accessory is missing, please contact the dealer where you purchased the product.
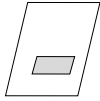
Owner's Manual
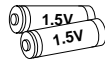
Batteries
(2 AA)

75 Ohm Coaxial Cable

Remote Control

D-sub 15 pin Cable

Power Cord

DVI-D Cable
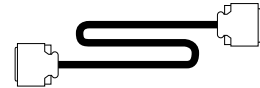
Tuner Box Cable
(FACTORY INSTALLED)
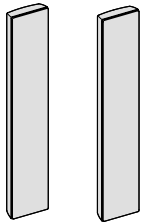
Speakers (2)
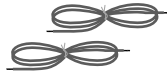
Pre-cut
Speaker Wires (2)
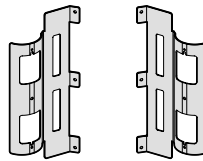
Speaker Brackets (2)
(LOCATED UNDERNEATH STYRO-
FOAM PACKAGING AT THE
BOTTOM OF THE PLASMA BOX.)
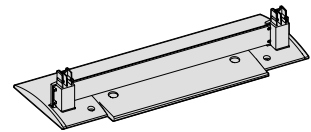
Matching Stand

The plasma TV panel needs the matching stand (included) or other mounting hardware to stand vertically without tipping.

Be sure to use the matching stand (included) or other mounting hardware that is designed specifically for this product.

For correct installation and mounting it is strongly recommended to use a trained, authorized dealer. Failure to follow correct installation procedures could result in damage to the equipment or injury to the installer. Product warranty does not cover damage caused by improper installation.

Installing the Plasma TV on the Stand

Preparations

1. Unpack the plasma TV.

1. Open the top of the cardboard in which the plasma TV is packed and remove the three pieces of styrofoam.

2. Pull off the cardboard from the top protective sheet.

Styrofoam
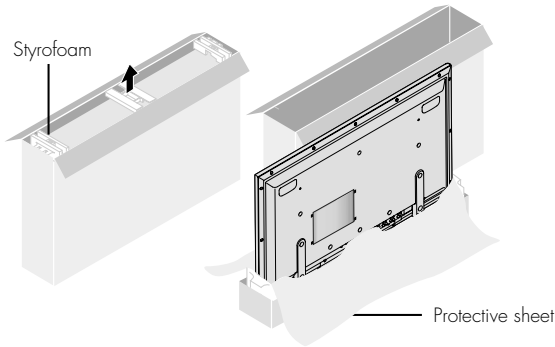
Protective sheet

2. Lay the plasma TV down.

Place the protective sheet in which the plasma TV was wrapped on a strong and sturdy table or stand larger than the plasma TV. Lay the plasma TV on the protective sheet face down. Placing pressure on the glass surface on the front of the plasma TV could damage it.
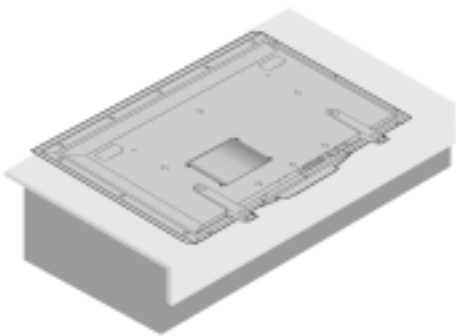
3. Remove the stand from the box.

4. Insert the stand into the mounting legs of the plasma TV and fasten it.

Use four of the included display mounting screws to fasten the TV to the stand.
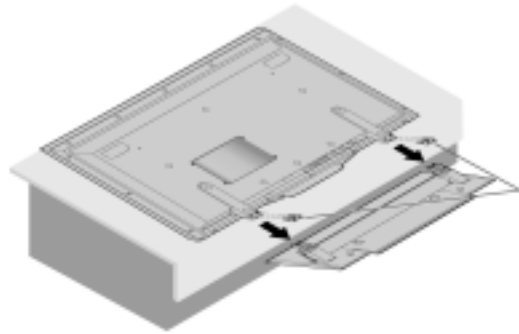
For proper ventilation, allow a clearance of 4" on each side and the top, 2.36" on the bottom, and 2" from the wall.

4 inches

2 inches

4 inches   4 inches

2.36 inches
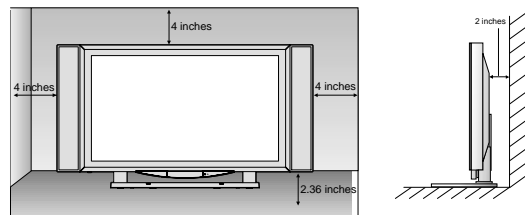
| ⚠ | CAUTION: | Tighten the screws immediately after placing the TV on the stand. If not, the TV could tip over, resulting in injury. |

When mounting this TV to a wall, a UL 1678 listed wall mounting bracket suitable for the weight and mounting surface must be used.

- Wall mounts not included.
- Be sure to use mounting hardware that is designed specifically for this product
- For correct installation and mounting, it is strongly recommended to use a trained, authorized dealer.

Wall Mount Installation
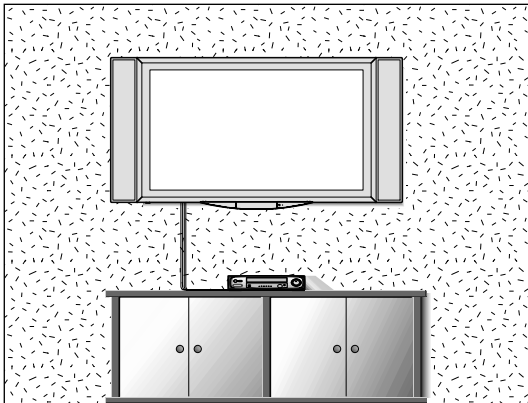
For proper ventilation, allow a clearance of 4" on each side and 2" from the wall.
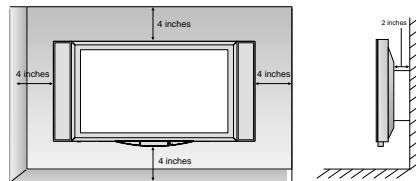
Matching Speaker Installation

1. Remove Speaker Brackets from the bottom of Plasma box. They are located underneath the styrofoam packaging at the bottom of the Plasma box.

2. Remove the speakers from the box.

3. Fasten the right Speaker Bracket to the Right Speaker using the 3 included mounting screws. Repeat this procedure for the Left Speaker.
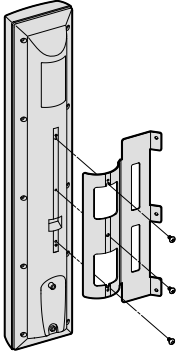
4. Fasten the Right Speaker Assembly (Speaker & Bracket) to the Plasma TV using the 3 included mounting screws. Repeat this procedure for the Left Speaker Assembly (Speaker & Bracket).
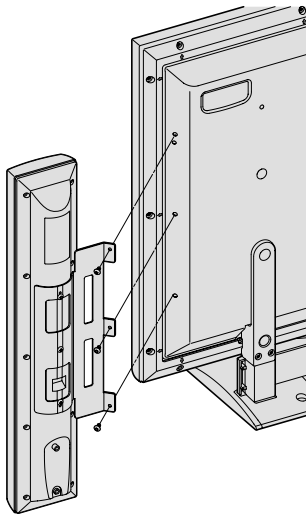
5. Remove Speaker wire from Accessories box. Remove pre-cut plastic from both ends of the Speaker Wire. This will expose the copper wire. Twist the copper wire counter clockwise as shown below.
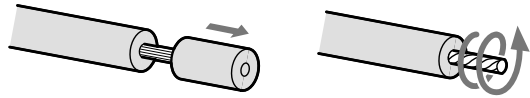
Repeat this procedure for the other speaker wire.

6. Press the red (+) terminal tab on the back of the Right Speaker. Insert the red wire into the red (+) terminal. Release the tab to secure the wire.

7. Press the black (–) terminal tab on the back of the Right Speaker. Insert the black wire into the black (–) terminal. Release the tab to secure the wire.

8. Repeat steps 6 & 7 for the Left Speaker.
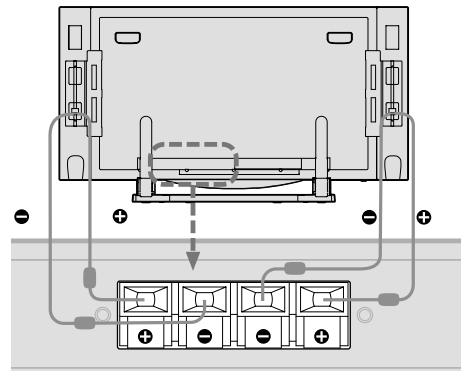
9. Press the red (+) terminal tab on the back of the TV. Insert the red wire (coming from the Right Speaker) into the red (+) terminal. Release the tab to secure the wire.

10. Press the black (–) terminal tab on the back of the TV. Insert the black wire into the black (–) terminal. Release the tab to secure the wire.

11. Repeat steps 9 & 10 for the wires coming from the Left Speaker.

Controls
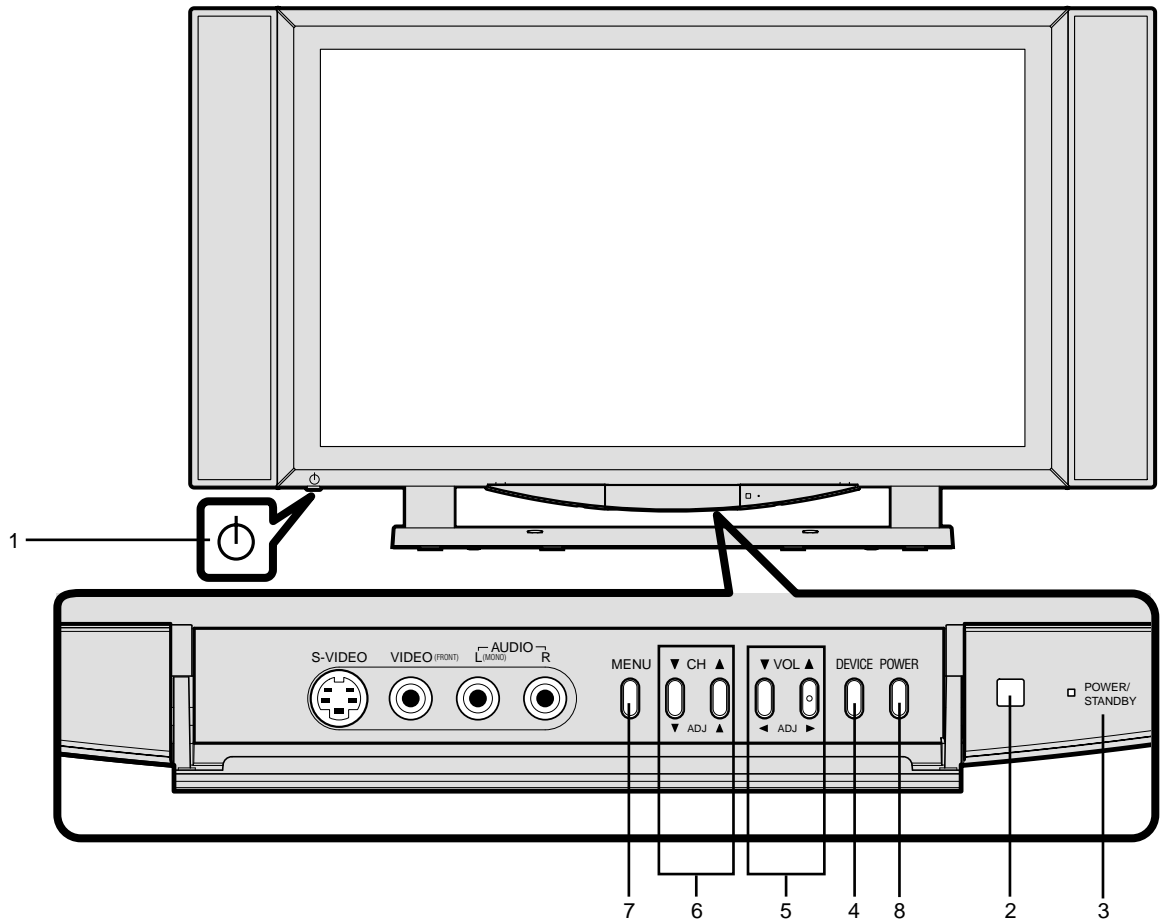
1. ON/OFF SWITCH
Turns the TV's power on and off.

2. REMOTE SENSOR WINDOW
Receives the signals from the remote control.

3. POWER/STANDBY INDICATOR
When the TV is on   Lights green.
When the TV is in the Standby mode   Lights red.

4. DEVICE
Switches the input, in the following order
ANT, VIDEO (REAR), VIDEO (FRONT), S–VIDEO, COM-
PONENT, RGB, MONITORLINK

5. VOLUME ▲ and ▼
Adjusts the volume. Functions as the ADJUST (◄ / ►) but-
tons in the On-Screen Menu mode.

6. CHANNEL ▲ and ▼
Changes channels. Functions as the Adjust (▲ / ▼) buttons
in the On-Screen Menu mode.

7. MENU
Displays the main On-Screen Menu.

8. POWER
Switches the TV from Standby to ON. Switches the TV from
ON to Standby.

Connection Options

S-VIDEO   VIDEO (FRONT)   AUDIO L(MONO) R   MENU   ▼ CH ▲   ▼ VOL ▲   DEVICE POWER   POWER/STANDBY
                                                      ▼ ADJ ▲   ◄ ADJ ►

2   1
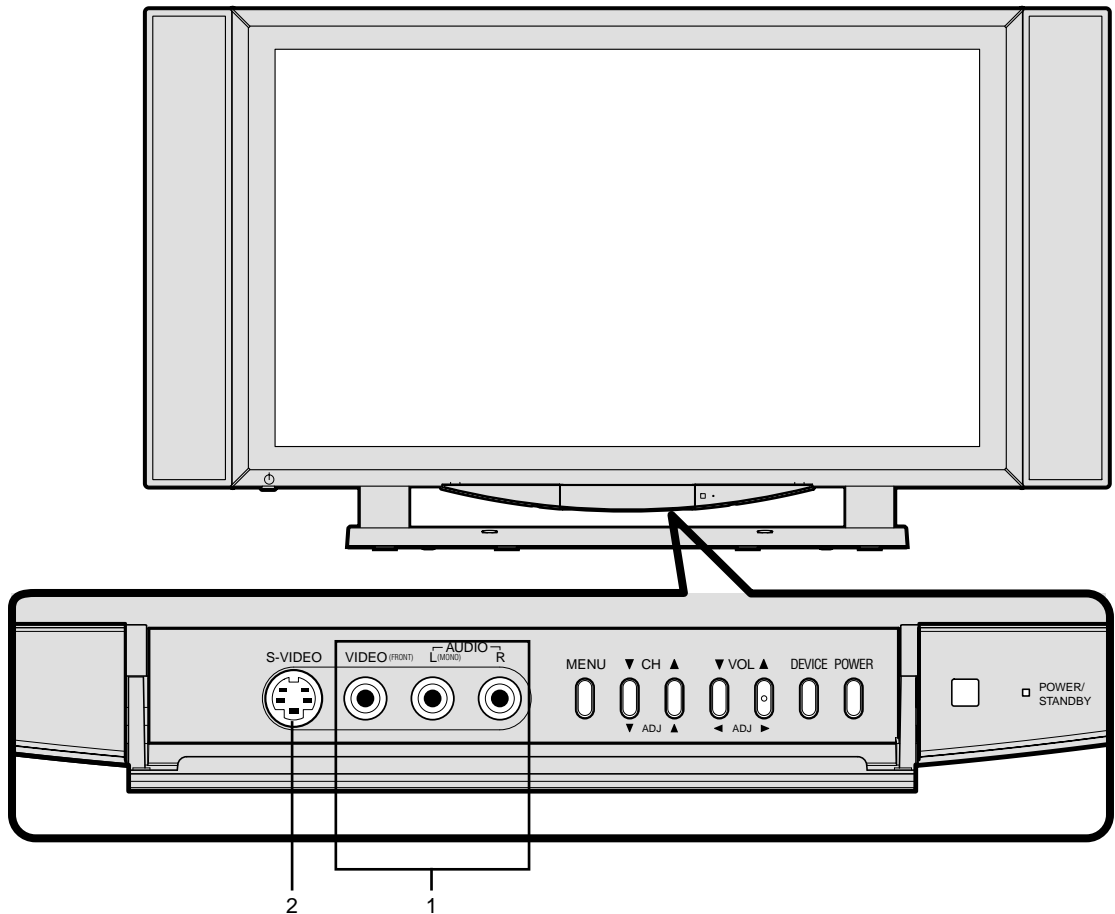
1. **VIDEO (FRONT) INPUT**
   Connection for audio/video out from external equipment.

2. **S-VIDEO**
   Connection for video out from external equipment.

Connection Options

Back Connection Panel

1   2   3   4

5   6   7   8   9   10
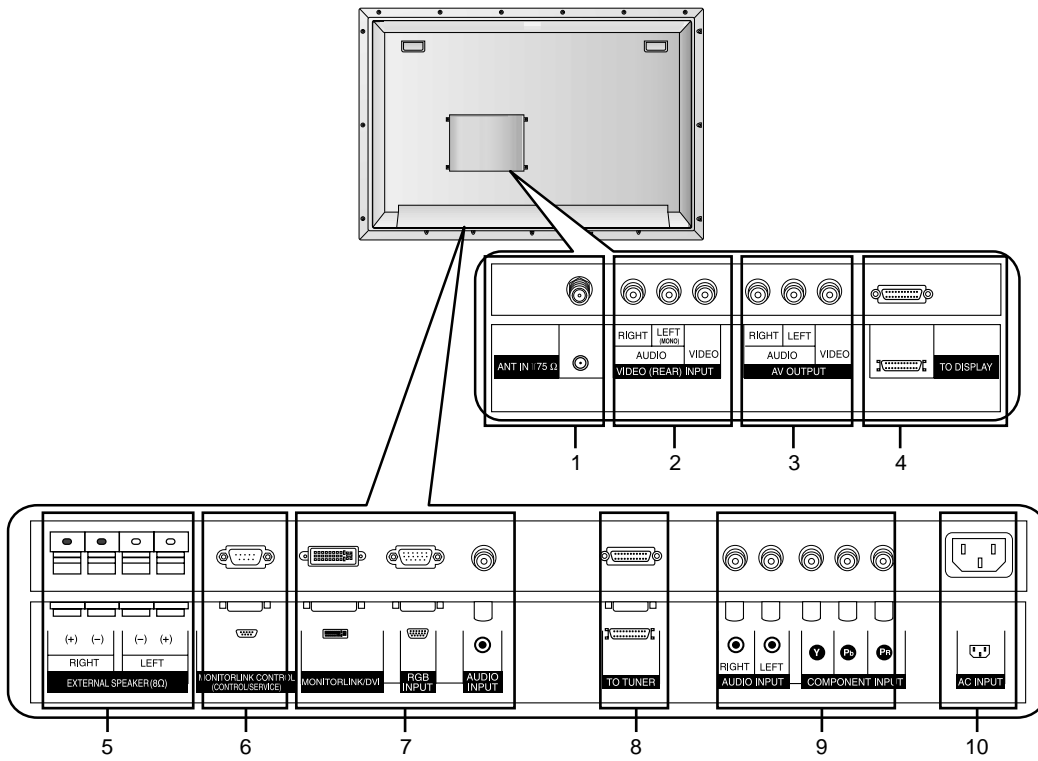
1. ANTENNA INPUT PORT
Connection for an over-the-air or terrestrial antenna, a cable TV wire, or cable box.

2. VIDEO (REAR) INPUT
Connection for audio/video out from external equipment.

3. AV OUTPUT
Connection for a second TV or monitor (ONLY). DO NOT CONNECT ANY OTHER INPUT SOURCES.

4. TO DISPLAY (Factory Connected)
Connect the TV to the Tuner with the tuner box cable.

5. EXTERNAL SPEAKER (8 ohm output)
Connect to optional external speaker(s).

6. MONITORLINK CONTROL (CONTROL/SERVICE) PORT
A digital control interface that works in conjunction with MonitorLink. While MonitorLink provides the digital video signal, MonitorLink Control provides enhanced functioning such as automatic power on/off and input selection. If you are not connecting a Mitsubishi HDTV Receiver/Controller with MonitorLink features, MonitorLink Control can be used as a RS-232C control signal input port.

7. MONITORLINK/DVI
MonitorLink when used with MonitorLink Control is a Mitsubishi exclusive digital interface for the display of high quality digital video signals from a Mitsubishi HD Receiver/Controller, such as the HD-5000. The MonitorLink input can also be used as a DVI input from other sources.
NOTE: When MonitorLink is used as a DVI-HD input, the terminal is compliant with EIA-861 standards for extended and high definition video; however, this input is not intended for use with personal computers or devices generating video signals with computer resolutions.
RGB INPUT/AUDIO INPUT JACKS
Connect the PC or DTV to the appropriate input port.

8. TO TUNER (Factory Connected)
Connect the plasma TV to the Tuner with the tuner box cable supplied.

9. COMPONENT INPUT/AUDIO INPUT JACKS
Connect a component video device to these jacks.

10. POWER CORD SOCKET
This TV operates on an AC power. The voltage is indicated on the Specifications page. Never attempt to operate the TV on DC power.

Remote Control Functions: Care and Operation

- When using the remote control, aim it at the remote control sensor on the TV.
- Under certain conditions such as if the remote IR signal is interrupted, the remote control may not function. Press the key again as necessary.

Operation

Installing the Batteries:
(Figure 2)

1. Remove the remote control's back cover by gently pressing the ridged tab in the direction of the arrow and sliding off the cover.

2. Load the batteries, making sure the polarities (+) and (-) are correct. For ease of installation, install the negative (-) side first.

For Best Results from the Remote Control:

• Be within 20 feet of the equipment.

• Do not press two or more buttons at the same time unless instructed to.

• Do not allow to get wet or become heated.

• Avoid dropping on hard surfaces.

• Do not use harsh chemicals to clean. Use only a soft, lightly moistened cloth.

• Do not mix new and old batteries.

• Do not heat, take apart, or throw batteries into fire.

• Use only AA batteries.

Operating the Remote Control:

You can use the remote to control the TV, CABLE/DBS/DTV, VCR, DVD, and AUDIO products. Select the product you want to control by moving the slide switch to the appropriate position. The remote control has been preset to operate the TV and other Mitsubishi products. To program the remote control to operate other products, see Use of the Remote Control with Other A/V Products, page 20.

Installing Batteries
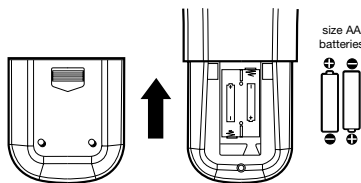
Figure 2. Installing the batteries.
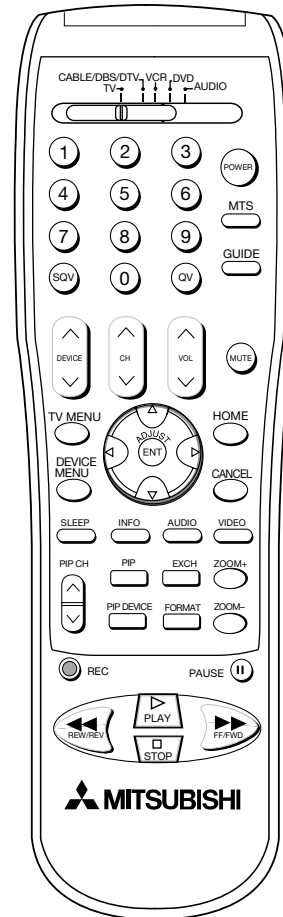
Figure 1. Remote Control Functions.

IMPORTANT

The remote control may return to its initial setting when the batteries are changed. You may need to reprogram.

Remote Control Functions: Overview of the TV Layer Buttons

Overview

(Figure 1, preceding page)

Slide Switch: Select A/V product to be controlled by the remote control.

POWER: Switches the TV from Standby to ON. Switches the TV from ON to Standby. Turns power on and off for other connected A/V products.

Numbers: Individually select channels or input information into TV.

SQV (Super Quick View™): Scan through a memorized list of favorite channels.

QV (Quick View™): Function not available in TV layer.

GUIDE: When the slide switch is set to CABLE/DBS/DTV, display the on-screen program guide (some cable boxes and DBS/DTV receivers).

DEVICE: Select the input to view; ANT, Video (Rear), Video (Front), S-Video, Component, RGB, MonitorLink.

CH (channel): Scroll up or down through memorized channels. Skips DVD chapters in DVD layer.

VOL (volume): Change sound level.

MUTE: Turn sound on or off.

TV MENU: Display on-screen menu system.

DEVICE MENU: Display menu for a connected A/V device.

ADJUST: Navigate menus, change settings, and move the PIP on-screen location.

ENT (enter): Select a channel number or menu item.

HOME: Exit on-screen menus and return to TV viewing.

CANCEL: Function not available in TV layer. Used as a sub-channel button in Cable/DBS/DTV layer.

INFO: Display on-screen summary of the current input used and any broadcast information available (including current V-Chip information, Signal Source and Format). Additionally, if you press the INFO key, it will display time, day and sleep time.

AUDIO: Select the individual audio settings.

VIDEO: Select the individual video settings.

PIP CH: Scroll up or down through memorized channels in PIP.

PIP: Cycle through PIP display choices.

EXCH: Exchange PIP with the main TV picture.

SLEEP: Set the TV to turn off within 2 hours. See Sleep Timer, page 33, for setup instructions.

PIP DEVICE: Select the PIP input source.

FORMAT: Change the shape and size of the main TV picture.

REC: Manually record with your VCR or recordable DVD.

REW/REV: Rewind or reverse search with your VCR, reverse scan with your DVD, or skip reverse with your CD.

PLAY: Play your VCR, DVD, or CD.

STOP: Stop your VCR, DVD, or CD.

FF/FWD: Fast forward or forward search with your VCR, fast play with your DVD, or skip forward with your CD.

PAUSE: Pause your VCR, DVD, AV Disc, or freeze the PIP image. LCD Monitor 5 8 03.indd 5/8/2003, 3:02 PM 24

ZOOM +: Enlarges the main picture.

ZOOM −: Reduces the main picture.

Use of the Remote Control with Other A/V Products

Programming the Remote Control to Use with Other Brands of Audio and Video Products:
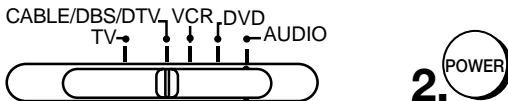
(Figures 1-3 this page, figures 4-5 following page)

1. Move the slide switch at the top of the remote to the product you want to control.

2. Press and hold the POWER button on the remote control.

3. Enter the first three digit code listed for your equipment, and then release the POWER button on the remote control.

4. Point the remote control to the equipment and press the POWER button.

Note: If the equipment responds, the remote control is properly programmed to operate the equipment. If the equipment does not respond, repeat steps 2-4 with the next three digit code listed in step 3 for your equipment.

IMPORTANT
When set to TV, the PLAY, STOP, REW/REV, and FF/FWD buttons will operate the VCR after the VCR codes have been properly programmed into the remote control.

---

1. **2.** POWER

3.

Cable Box Codes		
Cable box brand	**Code to enter:**	If your cable box code is not listed here, please see page 48 for a complete listing.
General Instruments/ Jerrold	119, 120, 121, 122,123, 124	
Motorola	125, 126, 127	
Oak	139, 137, 102	
Pioneer	101, 116	
Scientific Atlanta	112, 113	
Zenith	117, 100	
To reset to default code, enter 000		

Figure 1. Programming the remote to control your cable box.

1. **2.** POWER

3.

Satellite Receiver Codes		
Satellite brand	**Code to enter:**	If your satellite receiver code is not listed here, please see page 49 for a complete listing.
Mitsubishi DTV - DBS	006	
DishNetwork	175	
Hughes - DBS	173	
Panasonic - DBS	174	
RCA - DBS	176	
Sony - DBS	177	
Toshiba-DBS	170, 173, 189, 190, 191	
To reset to default code, enter 000		

Figure 2. Programming the remote to control your satellite receiver.

1. **2.** POWER

3.

VCR Codes		
VCR brand	**Code to enter:**	If your VCR code is not listed here, please see page 49 for a complete listing.
Mitsubishi	001, 002	
Hitachi	020, 043, 065	
JVC	030, 054	
Philips / Magnavox	043, 044, 051	
Panasonic	041, 042, 043	
RCA	020, 053, 065	
Sony	048, 049, 050	
Toshiba	021	
To reset to default code, enter 000		

Figure 3. Programming the remote to control your VCR.

Use of the Remote Control with Other A/V Products
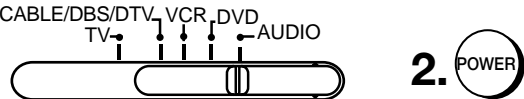
DVD Player Codes

DVD/LDP brand	Code to enter:	
Mitsubishi	003	If your DVD code is not listed here, please see page 48 for a complete listing.
JVC	257	
Panasonic	250	
Philips	258, 253, 272	
Pioneer DVD	252	
Samsung	261	
Sony	254	
Toshiba	253	
To reset to default code, enter 000		

Figure 4. Programming the remote to control your DVD or LDP.

A/V Receiver Codes

Audio brand	Code to enter:	
Mitsubishi A/V receiver and/or CD player	010, 015, 011, 012, 013, 014	If your audio code is not listed here, please see page 48 for a complete listing.
Denon	234, 235, 236, 245, 246, 359	
Harman Kardon	215, 223, 242	
JVC	233, 232	
Kenwood	208, 200	
Marantz	224, 350	
Onkyo	209, 214, 240, 247	
Pioneer	205, 207	
Sony	222, 249	
Technics	218, 219, 221	
Yamaha	202, 201, 243, 244	
To reset to default code, enter 000		

Figure 5. Programming the remote to control your A/V receiver.

IMPORTANT

If the slide switch is set to TV when you enter an A/V receiver code, VOLUME and MUTE will control the A/V receiver rather than the TV. To return volume and mute control to the TV, set the slide switch to TV, press and hold POWER and enter 000.

After entering the correct codes in each position of the remote control, use the slide switch to select which product will respond when an operational button is pressed. If you enter a code from the AUDIO chart while the slide switch is set to TV, the volume and mute functions change to match the A/V receiver. This is useful when using an A/V receiver with the TV all the time. In all other cases, only one of the below devices is allowed for each slide switch position.

TV position:
   TV
   A/V receiver (volume and mute only)

Cable/DBS/DTV position:
   Cable box
   Satellite receiver
   DTV receiver

VCR position:
   VCR

DVD position:
   DVD
   LD Player

Audio position:
   A/V receiver
   Mitsubishi CD player

If you have a Mitsubishi A/V receiver, the audio position may be used in conjunction with select Mitsubishi CD players. Your audio position must be programmed to either 010 or 011. Plug the CD player power cord into a switched outlet on the back of your A/V receiver. Pressing the POWER button turns On the A/V receiver, along with the CD player. In the audio position, for some CD players, the transport controls (FF, Play, Rew, etc.) operate the CD player.

IMPORTANT

Some manufacturers may change their products, or they may use more than one remote control system. If this is the case, your remote control may not be able to operate your VCR, DVD, cable box, satellite receiver, or A/V receiver.

Remote Control Functions: Special Functions

When your remote control has been Programmed to operate another manufacturer's product, the function performed on each layer may vary. The most common functions are:

VCR			
•POWER	•PLAY	•PAUSE	•FF/FWD
•CHANNEL up/down	•REC	•STOP	•REW/REV
•Mitsubishi VCRs will be compatible with additional buttons			
Cable Boxes and Satellite Receivers			
•POWER	•ENTER (on some models)		•ADJUST up/down/left/right
•CHANNEL up/down	•CANCEL (on some models)		(on some models)
•0-9 Number Buttons (on some models)			•GUIDE (on some models)
A/V Receivers			
•POWER	•VOLUME		•MUTE
Mitsubishi A/V Receivers			
•Direct Input Selection Buttons –use number buttons, SQV, and QV (on some models)			
Mitsubishi CD Players (not all functions for all models)			
•PLAY	•FF/FWD	•REW/REV	•PAUSE •STOP
DVD and Laser Disc Players (not all functions for all models)			
•POWER •PLAY	•ARROW up/down/left/right	•PAUSE	•CANCEL (on some models)
•MENU •STOP	(on some models)	•REW/REV	•ENTER
•0-9 Number Buttons (on some models)		• FF/FWD	•CHANNEL (on some models)

Remote Control Functions: Operation of PIP

Picture-In-Picture (PIP) features allow you to view Programming in different ways. While watching the main screen, you can display programs from other channels and other inputs. To see which inputs can and cannot be used together, see Selecting an Input Selection for PIP, Page 40.

Activating the PIP

Press PIP to choose a display format.

To turn PIP Off, press PIP. The next time you activate PIP, the last used PIP format will be displayed first.

External Equipment Connections

Antenna Connection

- Antenna or Cable Service without a Cable Box Connection
- For optimum picture quality, adjust antenna direction if needed.

Multi-family Dwellings/Apartments
(Connect to wall antenna socket)

Wall Antenna
Socket

Bronze Wire

RF Coaxial Wire (75 ohm)

VHF Antenna
UHF Antenna

Turn clockwise to tighten.

Outdoor
Antenna

Bronze Wire

Be careful not to bend the bronze wire when connecting the antenna.

• RF coaxial cable is not included with the TV.

Single-family Dwellings /Houses
(Connect to wall jack for outdoor antenna)

RIGHT LEFT (MONO) AUDIO VIDEO | RIGHT LEFT AUDIO VIDEO | TO DISPLAY
ANT IN 75 Ω | VIDEO (REAR) INPUT | AV OUTPUT

VHF   UHF

Signal
Amplifier

- In a poor signal area, purchase and install a signal amplifier for better picture quality.

- If the antenna needs to be split for two TVs, include a "2-Way Signal Splitter" in the connections.

- If the antenna is not installed properly, contact your dealer for assistance.

NOTE: Not all cables shown are included with the TV. They are available at most consumer electronics stores.

VCR Setup

- To avoid picture noise (interference), leave an adequate distance between the VCR and TV.
- Use the Long Life feature to avoid having a fixed image remain on the screen for a long period of time, i.e. a frozen still picture from a VCR. If the 4:3 picture format is used, the fixed image may remain visible on the screen and create permanent phosphor burn-in. Read Page 7 for more information regarding Uneven Phosphor Aging.

Connection 1

Set VCR switch to 3 or 4 and then tune TV to the same channel number.

Connection 2

1. Connect the audio and video cables from the VCR's output jacks to the TV input jacks, as shown in the figure.
   When connecting the TV to VCR, match the jack colors (Video = yellow, Audio Left = white, and Audio Right = red).
2. Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)
3. Use the **DEVICE** button on the remote control to select **Video (Rear)**.

VCR
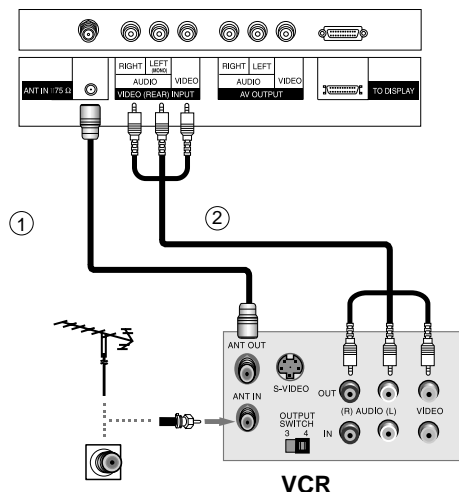
Cable TV Setup

- After subscribing to a cable TV service from a local provider and installing a converter, you can watch cable TV programming.
- For further information regarding cable TV service, contact your local cable TV service provider(s).

Connection 1

1. Select 3 or 4 with channel switch on cable box.
2. Tune the TV channel to the same selected output channel of cable box.
3. Select channels at the cable box or with the cable box remote control.

Connection 2

1. Connect the audio and video cables from the cable box output jacks to the TV input jacks, as shown in the figure.
   When connecting the TV to cable box, match the jack colors (Video = yellow, Audio Left = white, and Audio Right = red).
2. Use the **DEVICE** button on the remote control to select **Video (Rear)**.
3. Select channels with the cable box remote control.
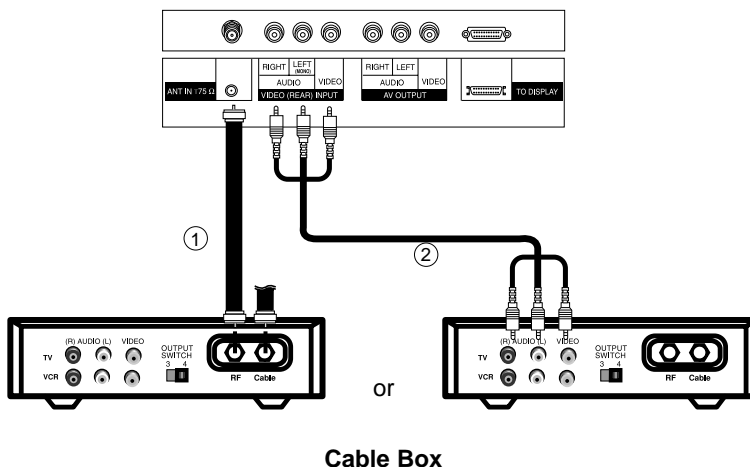
or

Cable Box

NOTE: Not all cables shown are included with the TV. They are available at most consumer electronics stores.

External A/V Source Setup

How to connect
Connect the audio and video cables from the external equipment's output jacks to the TV input jacks, as shown in the figure.
When connecting the TV to external equipment, match the jack colors (Video = yellow, Audio Left = white, and Audio Right = red).

How to use
1. Use the **DEVICE** button on the remote control to select **Video (Rear)**.
2. Operate the corresponding external equipment. Refer to external equipment operating guide.

Camcorder

Video Game Set

DVD Setup

(FACTORY INSTALLED)
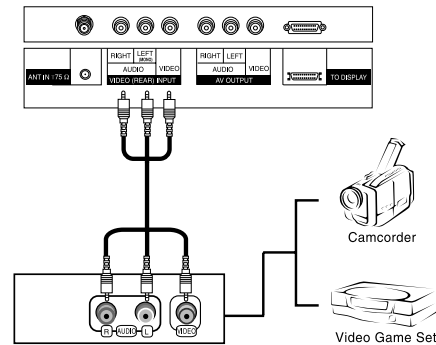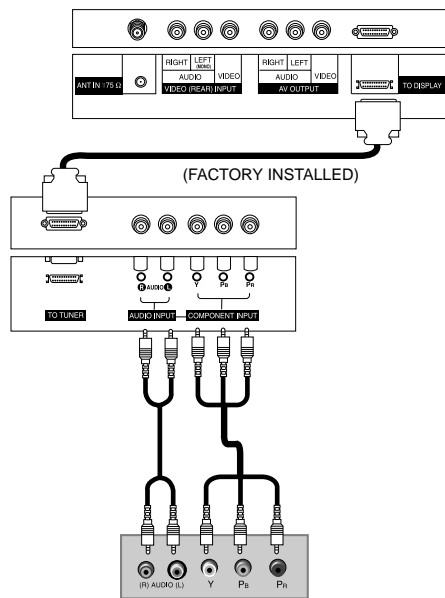
How to connect
1. Connect the DVD video outputs to the COMPONENT INPUT jacks (Y, P$_B$, P$_R$) and connect the DVD audio outputs to the AUDIO INPUT jacks.

How to use
1. Turn on the DVD player, insert a DVD.
2. Use the **DEVICE** button on the remote control to select **Component**.
3. Refer to the DVD player's manual for operating instructions.

- **Component Input ports**
  To get better picture quality, connect a DVD player to the component input ports as shown below.

The TV Component Ports	Y	P$_B$	P$_R$

DVD Player Video Output Ports	Y	Pb	Pr
	Y	B-Y	R-Y
	Y	Cb	Cr
	Y	P$_B$	P$_R$

DTV Setup

- To watch digitally broadcasted programs, purchase and connect a digital set-top box.
- This TV supports HDCP (High-bandwidth Digital Content Protection) protocol for DTV (480p,720p,1080i) modes.

How to connect
1. Use the TV's COMPONENT (Y, P$_B$, P$_R$) INPUT, RGB, or MONITORLINK/DVI jack for video connections, depending on your set-top box connector. Then, make the corresponding audio connections.

How to use
1. Turn on the digital set-top box. (Refer to the owner's manual for the digital set-top box.)
2. Use the **DEVICE** button on the remote control to select **Component**, **RGB** or **MonitorLink**.
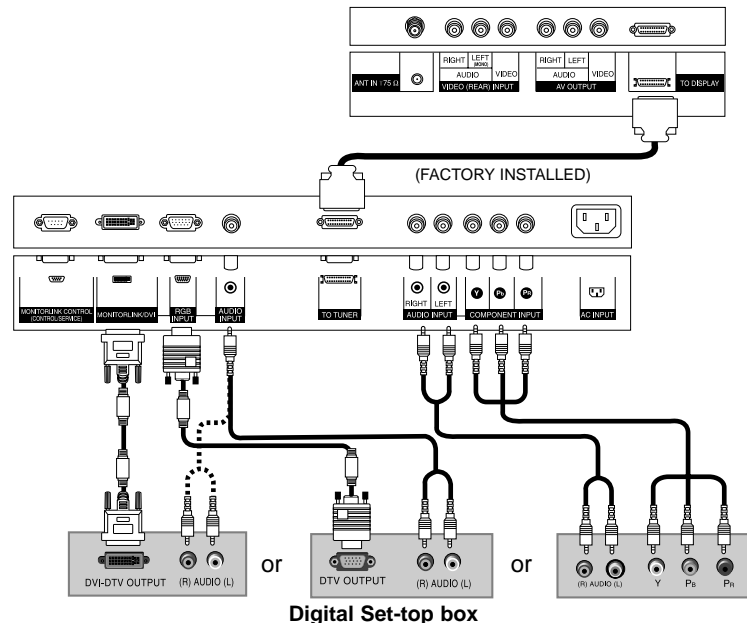
(FACTORY INSTALLED)

or   or

Digital Set-top box

NOTE: Not all cables shown are included with the TV. They are available at most consumer electronics stores.

Monitor Out Setup

The TV has a special signal output capability which allows you to hook up a second TV or monitor.

Connect the second TV or monitor to the TV AV OUTPUT. See the Operating Manual of the second TV or monitor for further details regarding that device's input settings.

NOTE: • Component, RGB-PC/DTV 480p/720p/1080i, S-video input sources cannot be used for Monitor out.
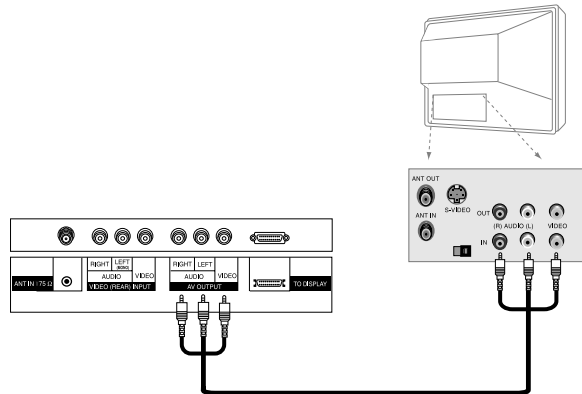
PC Setup

- This TV provides Plug and Play capability, meaning that the PC adjusts automatically to its settings. The TV sends configuration information (EDID) to the PC using the Video Electronics Standard Association (VESA) Display Data Channel (DDC) protocol.

How to connect
1. To get the best picture quality, adjust the PC graphics card to a 640x480, 60Hz setting.
2. Use the TV's RGB INPUT port for video connections.
3. Then, make the corresponding audio connections. If using a sound card, adjust the PC sound as required.

How to use
1. Turn on the PC and the TV.
2. Turn on the TV by pressing the POWER button on the TV's remote control.
3. Use the **DEVICE** button on the remote control to select **RGB**.
4. Check the image on your TV. There may be noise in the PC mode associated with the resolution, vertical pattern, contrast or brightness. If noise is present, change the PC mode to another resolution, change the refresh rate to another rate or adjust the brightness and contrast on the menu until the picture is clear. If the refresh rate of the PC graphics card can not be changed, change the PC graphics card or consult the manufacturer of the PC graphics card.

NOTES: • The MonitorLink Input is not intended for use with personal computers or devices generating video signals with computers.
• Avoid keeping a fixed image on the TV's screen for a long period of time. The fixed image may become permanently imprinted on the screen. Use the Orbiter screen saver when possible.
• The synchronization input form for Horizontal and Vertical frequencies is separate.
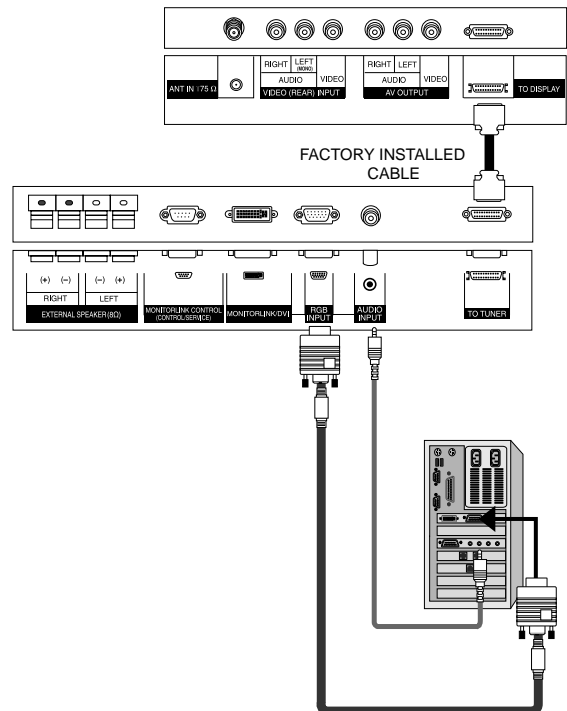
FACTORY INSTALLED CABLE

**NOTE: Not all cables shown are included with the TV. They are available at most consumer electronics stores.**

HD-5000/MONITORLINK SETUP

1. Connect a MonitorLink/DVI cable from the TV back panel to the Mitsubishi HD Receiver/Controller back panel.

2. Connect the MonitorLink Control/RS-232 cable from the TV back panel to the Mitsubishi HD Receiver/Controller back panel.

3. By using a Stereo Mini-plug to L and R RCA adapter, connect the L (left) and R (right) audio cables from the HD-5000 receiver/controller to the Audio Input Mini-plug on the back of the TV.

IMPORTANT: Additional connection cables are not provided with the TV. They should be available at most electronic stores.

NOTES: • The 29-pin MonitorLink/DVI and 9-pin RS-232 cables can be found at your local electronics store. Please refer to www.mitsubishi-tv.com for more information on RS-232C control.
• When MonitorLink is used as a DVI-HD input, the terminal is compliant with EIA-861 standards for extended and high definition video; however, this input is not intended for use with personal computers or devices generating video signals with computer resolutions.
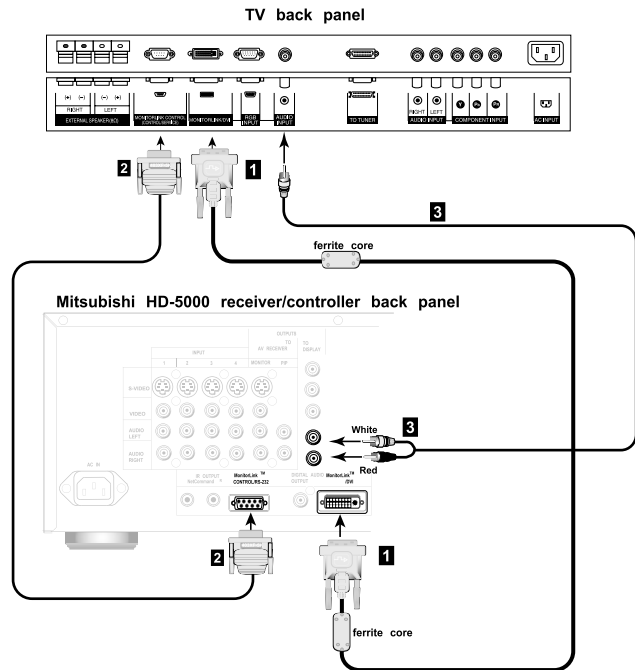
CAUTION: To assure continued FCC compliance, the user must use a shielded video interface cable with bonded ferrite cores at each end, when using the MonitorLink/DVI input.

Monitor Display Specifications (RGB-PC Mode)

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)	Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
640x350	31.468	70.09	800x600	35.156	56.25
	37.861	85.08		37.879	60.31
720x400	31.469	70.08		48.077	72.18
	37.927	85.03		46.875	75.00
640x480	31.469	59.94		53.674	85.06
	35.000	66.66	832x624	49.725	74.55
	37.861	72.80	1024x768	48.363	60.00
	37.500	75.00		56.476	70.06
	43.269	85.00		60.023	75.02
848x480	31.500	60.00	1152x864	54.348	60.05
	35.00	70.00		63.995	70.01
	37.500	75.00		67.500	75.00
852x480	31.500	60.00	1152x870	68.681	75.06
	35.000	70.00	1280x960	60.000	60.00
	37.500	75.00	1280x1024	63.981	60.02

Operation

Turning on the TV

POWER

ON:

1. Plug the power cord into an active AC power outlet.

2. Press the ⏻ (on/off) button located underneath the left side of the front panel/frame. The TV's POWER/STANDBY indicator turns red and the TV is switched to standby mode.

3. Press the POWER button on the remote control to turn the TV on. The POWER/STANDBY indicator will turn green when the TV is on.

OFF:
Press the ⏻ (on/off) button (underneath the front panel) to turn off the TV. The TV's POWER/STANDBY indicator goes off.

STANDBY ON:
Press the POWER button (on the remote control) to turn on the TV. The TV's POWER/STANDBY indicator will light up (green) when the TV is on.

STANDBY OFF:
Press the POWER button on the remote. The TV's POWER/STANDBY indicator turns red and the standby mode is set. If you don't plan to use the TV for an extended period of time, shut it off by using the ⏻ (on/off) button.

• CAUTION
 If you connect or disconnect the Tuner Box cable to the TV, the TV will switch to the standby mode.

Menu Language Selection

- The menus can be shown on the screen in the selected language. First select your language.

1. Press the **MENU** button and then use ▲ / ▼ button to select the **SPECIAL** menu.

2. Press the ► button and then use ▲ / ▼ button to select **Language**.

3. Press the ► button and then use ▲ / ▼ button to select your desired language. From this point on, the on-screen menus will be shown in the language of your choice.

4. Press the **MENU** button to save new setting and exit **SPECIAL** menu.

SPECIAL		
Language ►	√ English	
Button Lock	Español	
Long Life	Français	
Low power		
Caption / Text		
Captions		
MENU Prev.		

Channel Menu Options

Auto Programming is used to memorize all the active channels in your area before you can use the TV.
There are two ways of storing channels in the Tuner's memory.
One is called AUTO PROGRAM and the other is called MANUAL PROGRAM.
In AUTO PROGRAM mode, the TV will memorize the channels in ascending numerical order. If there are additional channels you want to add or delete, you can manually add or delete those channels with Manual Program.

Memorizing the Channels with Auto Program

- Redo Auto Program if the TV is ever moved to another location.
- Auto Program will only operate with the ANT. connected.
- If channel numbers for broadcast over-the air TV and cable TV are duplicated where different channels have the same number, press the same number buttons again to toggle between:

Broadcast TV Channels	←——————→	Cable TV Channels

: (For example, press 17 to go to the channel, press 17 again to go to the duplicated channel.)

1. Press the **TV MENU** button and then use ▲ / ▼ button to select **CHANNEL** menu.
2 Press the ► button to select **Auto program**.
3. Press the ► button to start the **Auto program** feature.

If you want to stop auto programming, press the **ENTER** button. Only the channels searched up to that time are memorized.

Memorizing the Channels with Manual Program

- You can memorize or erase channels manually.

1. Press the **TV MENU** button and then use ▲ / ▼ button to select **CHANNEL** menu.
2. Press the ► button and then use the ▲ / ▼ button to select **Manual program** feature.
3. Press the ► button to select a channel.
4. Use the ▲ / ▼ button or NUMBER buttons to select the channel number you want to memorize or erase.
5. Press the ► button and then use ▲ / ▼ button to select **Memory** or **Erase**.
6. Press the **ENTER** button.

Fine Tuning Adjustment

- This function adjusts the pictures stability and condition when it is poor.

1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **CHANNEL** menu.
2. Press the ► button and then use ▲ / ▼ button to select **Manual program**.
3. Press the ► button and then use ◄ / ► button to select **Fine**.
4. Use the ▲ / ▼ button to adjust the picture to your preference.
5. Press the **ENTER** button to save.

Favorite Channel Memory

- Favorite channel memory is a convenient feature that lets you quickly scan up to 5 channels of your choice without having to wait for the TV to scan through all the in-between channels.

1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **CHANNEL** menu.
2. Press the ► button and then use ▲ / ▼ button to select **SQV Memory**.
3. Press the ► button and then use ▲ / ▼ button to select the first favorite channel.
4. Press the ◄ / ► button to tune & select favorite channel.
5. Press the ▲ / ▼ button to select second favorite channel position.
6. Press the ◄ / ► button to tune & select second channel.
7. Repeat steps 5 & 6 for remaining favorite channels.
8. Press the **ENTER** button to save.

• To tune to a favorite channel, press the **SQV** (Favorite channel) button repeatedly. The five favorite channels appear on the screen in numerical order.
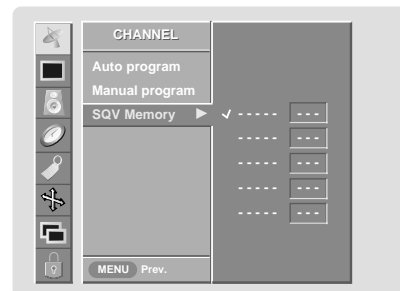
Picture Menu Options

- PICTURE menu adjustments are unique to each input source. Readjust PICTURE menu settings for each input source as preferred.
  • RGB (PC) / DVI (PC),
  • RGB (DTV) / DVI (DTV) / Component (480p, 720p, 1080i)
  • Video / S-Video / Component (480i) / TV

Auto Picture Control

- **Auto Picture** adjusts the TV for the best picture appearance.
- When adjusting picture options (contrast, brightness, color, sharpness and tint) manually, **Auto Picture** automatically changes to **Programmable**.

1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **PICTURE** menu.
2. Press the ▶ button and then use ▲ / ▼ button to select **Auto Picture**.
3. Press the ▶ button and then use ▲ / ▼ button to select the desired picture option (Sharp, Normal, Soft, Programmable).
4. Press the **ENTER** button to save.

   • **Sharp**, **Normal**, and **Soft** settings are preset for optimum picture quality at the factory and cannot be changed.

Manual Picture Control (**Programmable** option)

- You can adjust picture contrast, brightness, color, sharpness and tint to the levels you prefer.

1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **PICTURE** menu.

2. Press the ▶ button and then use ▲ / ▼ button to select the desired picture option (**Contrast**, **Brightness**, **Color**, **Sharpness**, **Tint**).

3. Press the ▶ button and then use ◀ / ▶ button to make appropriate adjustments.

4. Press the **ENTER** button to save.
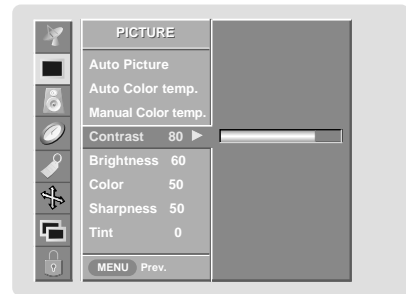
Auto Color Temperature Control

- To initialize values (reset to default settings), select the **Medium** option.
- When adjusting color temperature options (red, green, or blue) manually, Auto Color temp. automatically changes to **Programmable**.

1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **PICTURE** menu.

2. Press the ▶ button and then use ▲ / ▼ button to select **Auto Color temp.** .

3. Press the ▶ button and then use ▲ / ▼ button to select either **Medium** (Default), **High** (Preset), **Low** (Preset) or **Programmable** (Manual Adjustment).

4. Press the **ENTER** button to save.
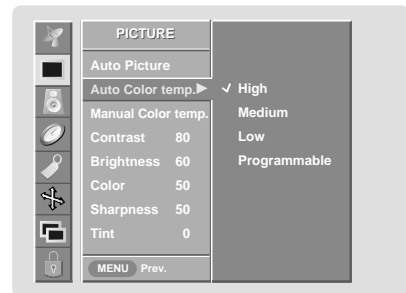
Manual Color Temperature Control (**Programmable** option)

- You can adjust red, green, and blue to any color temperature you prefer.

1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **PICTURE** menu.

2. Press the ▶ button and then use ▲ / ▼ button to select **Manual Color temp.**.

3. Press the ▶ button and then use ▲ / ▼ button to select **Red**, **Green** or **Blue**.

4. Use the ◀ / ▶ button to make appropriate adjustments.

   • The adjustment range for **Red**, **Green**, and **Blue** is -20 ~ +20.

5. Press the **ENTER** button to save.
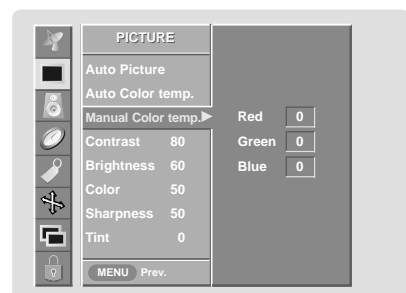
Sound Menu Options

Audio Mode

- Audio Mode lets you enjoy the best sound without any special adjustment.
- When adjusting sound options (treble, bass, and balance) manually, Audio Mode automatically changes to **Programmable**.

   1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **SOUND** menu.
   2. Press the ▶ button and then use ▲ / ▼ button to select **Audio Mode**.
   3. Press the ▶ button and then use ▲ / ▼ button to select any of the five sound modes.
   4. Press the **ENTER** button to save.

   • **Flat**, **Music**, **Movie** and **Sports** are factory presets and cannot be changed.

Level Sound

- Level Sound maintains an equal volume level; even if you change channels.

1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **SOUND** menu.
2. Press the ▶ button and then use ▲ / ▼ button to select **Level Sound**.
3. Press the ▶ button and then use ▲ / ▼ button to select **On** or **Off**.
4. Press the **ENTER** button to save.

```
           SOUND
   Audio Mode
   Level Sound    ▶      On
   Balance     0       ✓ Off
   Treble     50
   Bass       50

   MENU  Prev.
```

Manual Sound Control (**Programmable** option)

- You can adjust sound treble, bass, and balance to the levels you prefer.

1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **SOUND** menu.
2. Press the ▶ button and then use ▲ / ▼ button to select the desired sound option (**Balance**, **Treble**, **Bass**).
3. Press the ▶ button and then use ◀ / ▶ button to make appropriate adjustments.
4. Press the **ENTER** button to save.

```
           SOUND
   Audio Mode
   Level Sound
   Balance     0
   Treble     50  ▶   [___|_____]
   Bass       50

   MENU  Prev.
```

Stereo/SAP Broadcasts Setup

- The TV can receive MTS stereo programs and any SAP (Secondary Audio Program) that accompanies the stereo program, as the system to be transmitted one additional sound signal as well as the original one.
- Mono : The primary language is heard from left and right speakers. Signal mode is mono.
- Stereo : The primary language is heard from left and right speakers. Signal mode is stereo.
- SAP : The secondary language is heard from left and right speakers.

   1. Press the **MTS** button repeatedly.
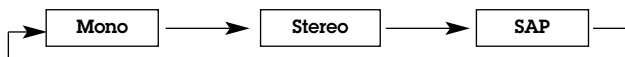
   ┌──▶ Mono ────▶ Stereo ────▶ SAP ──┐
   └──┘

   • Select mono sound mode if the signal is not clear due to poor signal reception.
   • **Stereo**, **SAP** modes are available only if included on the broadcast signal.

Timer Menu Options

Auto Clock Setup

- The time is set automatically from the PBS broadcast signal.
- The PBS channel signal includes information for the correct time and daylight savings time.

1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **TIMER** menu.

2. Press the ► button and then use ▲ / ▼ button to select **Clock**.

3. Press the ► button and then use ▲ / ▼ button to select **Auto**.

4. Press the ► button and then use ▲ / ▼ button to select your viewing area time zone. Your choices are: **E.S.T.** (Eastern Standard Time), **C.S.T.** (Central Standard Time), **M.S.T.** (Mountain Standard Time), **P.S.T.** (Pacific Standard Time), **Alaska**, or **Hawaii**.

5. Press the ► button and then use ▲ / ▼ button to set **PBS channel**.

6. Press the ► button and then use ▲ / ▼ button to set **D.S.T.** (Daylight Savings Time) Select **On**, or **Off** depending on whether or not your viewing area observes Daylight Savings Time.

7. Press the **ENTER** button to save.

8. Tune into your local PBS channel.

9. The time is set automatically from the PBS broadcast signal.
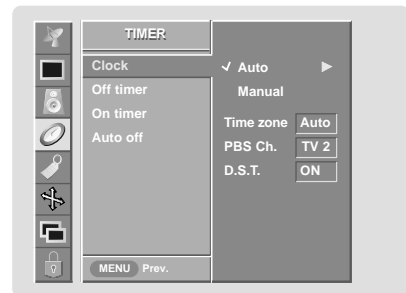
Manual Clock Setup

- If current time setting is not correct, set the clock manually.

1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **TIMER** menu.

2. Press the ► button and then use ▲ / ▼ button to select **Clock**.

3. Press the ► button and then use ▲ / ▼ button to select **Manual**.

4. Press the ► button and then use ▲ / ▼ button to set the hour.

5. Press the ► button and then use ▲ / ▼ button to set the minutes.

6. Press the **ENTER** button to save.

On/Off Timer Setup

- Timer function operates only if current time has been set.
- Off-Timer function overrides On-Timer function if they are set to the same time.
- The TV must be in standby mode for the On Timer to work.
- If you don't press any button within 2 hours after turning on the TV with the On Timer function, the TV will automatically switch back to standby mode.

1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **TIMER** menu.

2. Press the ► button and then use ▲ / ▼ button to select **Off timer** or **On timer**.

3. Press the ► button and then use ▲ / ▼ button to select **On**.
   • To cancel **On/Off timer** function, select **Off**.

4. Press the ► button and then use ▲ / ▼ button to set the hour.

5. Press the ► button and then use ▲ / ▼ button to set the minutes.

6. **For only On timer function**; Press the ► button and then use ▲ / ▼ button to set sound level. Then, press the ► button and then use ▲ / ▼ button to select the channel at turn-on.

7. Press the **ENTER** button to save.

Timer Menu Options continued

Auto Off

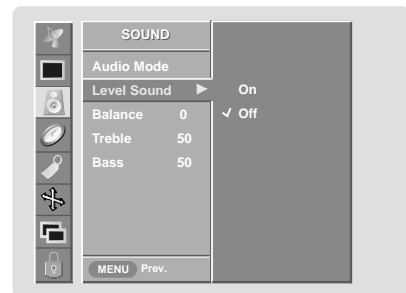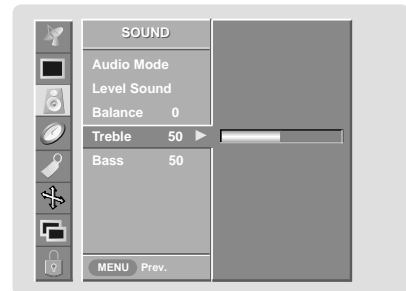- If there is no input signal, Auto off can be set to turn the TV off automatically after 10 minutes.

1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **TIMER** menu.
2. Press the ► button and then use ▲ / ▼ button to select **Auto off**.
3. Press the ► button and then use ▲ / ▼ button to select **On** or **Off**.
4. Press the **ENTER** button to save.

```
                    TIMER
   📡
   ▣     Clock
   🔊     Off timer
   ⬭     On timer
   🔑     Auto off      ►   √ On
                             Off
   ✛
   🗔
   🔒    MENU   Prev.
```
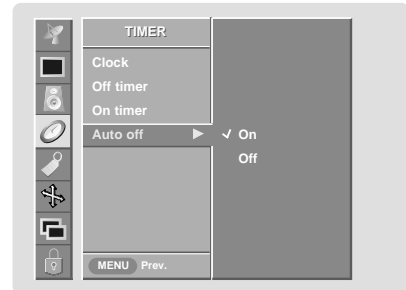
Sleep Timer

- Sleep Timer turns the TV off at a preset time. Note that this setting is cleared when the TV is turned off.

1. Press the **SLEEP** button repeatedly to select the number of preset minutes. First the 🕒ᶻᶻ --- **Min** option appears on the screen, followed by the Sleep Timer turn off times:
   10, 20, 30, 60, 90, 120, 180, and 240 minutes.
2. When the number of minutes you want is displayed on the screen, press the **ENTER** button. The Sleep Timer begins to count down from the number of minutes selected.
3. To check the remaining minutes before the TV turns off, press the **SLEEP** or **INFO** button once.
4. To cancel the Sleep Timer, press the **SLEEP** button repeatedly until 🕒ᶻᶻ --- **Min** appears.

Special Menu Options

Button Lock

- The TV can be set up so that it can only be used with the remote control.
- This feature can be used to prevent unauthorized viewing by locking out the front panel controls.
- This TV is programmed to remember which option it was last set to even if you turn the TV off.

1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **SPECIAL** menu.

2. Press the ▶ button and then use ▲ / ▼ button to select **Button Lock**.

3. Press the ▶ button and then use ▲ / ▼ button to select **On** or **Off**.

4. Press the **ENTER** button to save.

   • With the BUTTON LOCK ON, ⚠ **Button Lock**' appears on the screen if any button on the front panel is pressed.
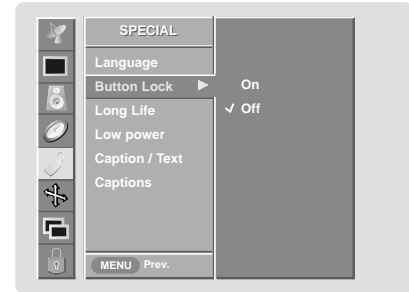
Long Life

Uneven phosphor aging/burn-in reduction feature. To minimize the risk of uneven phosphor aging/burn-in when displaying still images, the Mitsubishi PD-4225 offers a built-in feature known as ORBITER. The ORBITER feature intermittently shifts the screen image horizontally and vertically in small increments. This intermittent screen movement is usually not evident in full motion video. In some instances the ORBITER shift might be evident while displaying static guides or menus. The default setting for ORBITER is ON. Please do not shut the ORBITER off.

- A frozen still picture from a PC/video game displayed on the screen for prolonged periods will result in a ghost image remaining; even when you change the image. Avoid allowing a fixed image to remain on the TV's screen for a long period of time.
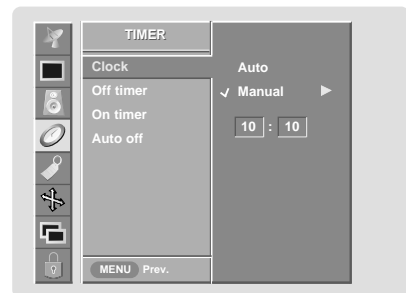
1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **SPECIAL** menu.

2. Press the ▶ button and then use ▲ / ▼ button to select **Long Life**.

3. Press the ▶ button and then use ▲ / ▼ button to select either **Off**, **White Field**, **Orbiter** or **Inverse**.

   • **Off**
   Uneven phosphor aging/burn-in reduction disabled.
   • **White Field**
   White Field helps remove permanent images from the screen. Note: An excessive permanent image may be impossible to clear entirely with White Field. To return to normal viewing, press any button.
   • **Orbiter (DEFAULT)**
   Orbiter may help prevent ghost images. However, it is best not to allow any fixed image to remain on the screen. To avoid a permanent image on the screen, the image will move every 2 minutes: Right → Right → Downside → Downside → Left → Left → Upside → Upside.
   • **Inverse**
   Negative Mode will automatically invert the TV panel color every 30 minutes.

4. Press the **ENTER** button to save.
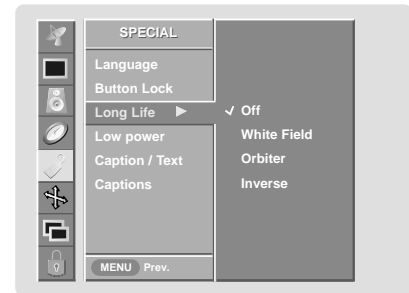
Low Power

- Low power reduces the TV power consumption.
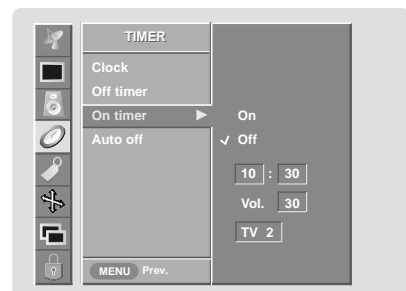
1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **SPECIAL** menu.

2. Press the ▶ button and then use ▲ / ▼ button to select **Low power**.

3. Press the ▶ button and then use ▲ / ▼ button to select **On** or **Off**.

   • When you select **On**, the screen darkens.

4. Press the **ENTER** button to save.

Special Menu Options continued

Closed Captions

Closed captioning is a process which converts the audio portion of a television program into written words which then appear as subtitles on the television screen. Closed captions allow viewers to read the dialogue and narration of television programs.

Using Closed Captions

FOLLOW ME
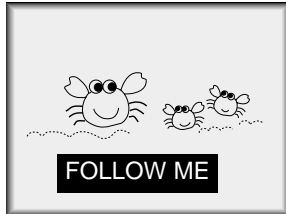
Captions are the subtitles of the dialogue and narration of television programs. For prerecorded programs, program dialogue can be arranged into captions in advance. It's possible to caption a live program by using a process called real-time captioning, which creates captions instantly. Real-time captioning is normally done by professional reporters using a machine shorthand system and computer for translation into English.

Captioning is an effective system for the hearing-impaired, and it can also aid in teaching language skills.

• The picture at left shows a typical caption.

Caption Tips

• Not all TV broadcasts include closed caption signals.
• Sometimes TV stations broadcast four different caption signals on the same channel. By selecting `From CC 1 to CC 4`, you can choose which signal you view. `CC 1` is usually the signal with the captions, while Another mode might show demonstration or programming information.
• Your TV might not receive caption signals because of the following situations.

1. Poor reception conditions are encountered:

• **IGNITION:**
  Picture may flutter, drift, suffer from black spots, or horizontal streaking. Usually caused by interference from automobile ignition systems, neon lamps, electrical drills, and other electrical appliances.

• **GHOSTS:**
  Ghosts are caused when the TV signal splits and follows two paths. One is the direct path and the other is reflected off tall buildings, hills or other objects. Changing the direction or position of the antenna may improve reception.

• **SNOW:**
  If your receiver is located at the weak, fringe area of a TV signal, your picture may be marred by small dots. It may be necessary to install a special antenna to improve the picture.

2. An old, bad, or illegally recorded tape is being played.
3. Strong, random signals from a car or airplane interfere with the TV signal.
4. The signal from the antenna is weak.
5. The program wasn't captioned when it was produced, transmitted, or taped.

Caption/Text

1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **SPECIAL** menu.

2. Press the ► button and then use ▲ / ▼ button to select **Caption/Text**.

3. Press the ► button and then use ▲ / ▼ button to select your caption selection.
   Your choices are: **CC1**, **CC2**, **CC3**, **CC4**, **Text 1**, **Text 2**, **Text3** and **Text4**.

4. Press the **ENTER** button to save.

SPECIAL

Language   ✓ CC 1
Button Lock   CC 2
Long Life   CC 3
Low power   CC 4
Caption / Text ► Text 1
Captions   Text 2
                   Text 3
                   Text 4

MENU Prev.
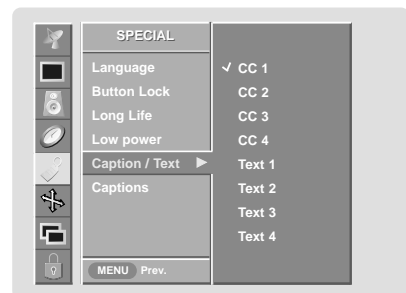
Captions

1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **SPECIAL** menu.

2. Press the ► button and then use ▲ / ▼ button to select **Captions**.

3. Press the ► button and then use ▲ / ▼ button to select **On**, **On if Mute**, or **Off**.

4. Press the **ENTER** button to save.

Screen Menu Options

Auto Adjustment

- RGB (PC) mode only; This function doesn't work for RGB-DTV mode.
- Automatically adjusts picture position and minimizes image shaking.
- **Auto Adjust** and **Manual Adjust** are not active in DVI mode.

1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **SCREEN** menu.

2. Press the ▶ button and then use ▲ / ▼ button to select **Auto Adjust**.

3. Press the ▶ button to run Auto adjustment.

   • When **Auto Adjust** has finished, **OK** will be shown on screen.
   • If the position of the image is still not correct, try Auto adjustment again or you can make further adjustments with the **Manual Adjust** option.

SCREEN	
Auto Adjust ▶	To set
Format	
Zoom in/out	
Position	
Manual Adjust	
VCR Mode	
Initialize	
VGA Mode	
MENU Prev.	

Setting Picture Format

- Caution: If a 4:3 fixed image is on the screen for a long time, it may cause permanent phosphor burn-in.
- It's not available the **Stretch** and **Expand** picture format in PC mode.

1. Press the **Format** button repeatedly to select the desired picture format. You can also adjust **FORMAT** in the **SCREEN** menu.

   • **Narrow**
   - Choose **NARROW** when you want to view a picture with an original 4:3 aspect ratio, with gray bars appearing at both the left and right sides.

   • **Standard**
   - Choose **STANDARD** when you want to adjust the picture horizontally, in a linear proportion to fill the entire screen.

   • **Stretch**
   - Choose **STRETCH** when you want to adjust the picture in a non-linear proportion, that is, more enlarged at both sides, to create a spectacular view.

   • **Expand**
   - Choose **Expand** when you want to view the picture without any alteration. However, the top and bottom portions of the picture will be cropped.

Picture Size Zoom

- When enlarging or reducing the picture, the image may become distorted.

1. Use **ZOOM+/ZOOM-** button to enlarge or reduce the picture size.
   • Zoom adjustment range is 100~300.

2. Adjust the main picture position by pressing the ▲ / ▼ / ◀ / ▶ buttons while zooming in or out.
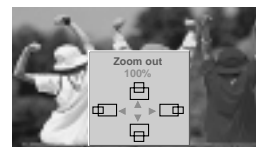
Adjusting Horizontal/ Vertical Position

- This function works in the following modes:
  RGB-PC, RGB-DTV (480p,720p,1080i), DVI-DTV (480p,720p,1080i),
  COMPONENT (480p,720p,1080i).

1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **SCREEN** menu.

2. Press the ▶ button and then use ▲ / ▼ button to select **Position**.

3. Press the ▶ button and then use ▲ / ▼ / ◀ / ▶ button to adjust the position.

4. Press the **ENTER** button to save.

```
              SCREEN
              Auto Adjust
              Format
              Zoom in/out
              Position        ▶
              Manual Adjust
              VCR Mode
              Initialize
              VGA Mode
              MENU  Prev.
```
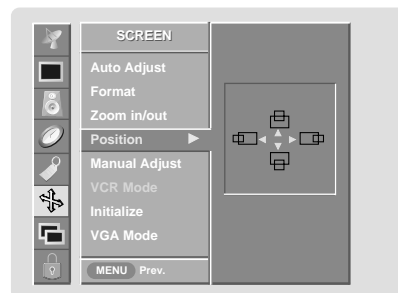
Manual Adjust (RGB-PC mode only)

- If the image still isn't clear after auto adjustment and especially if characters are still jittery, adjust the picture Phase manually.
- To correct the screen size, adjust **Clock**.

1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **SCREEN** menu.

2. Press the ▶ button and then use ▲ / ▼ button to select **Manual Adjust**.

3. Press the ▶ button and then use ▲ / ▼ button to to select **Phase** or **Clock**.

4. Use the ◀ / ▶ button to make appropriate adjustments.

   • The **Phase** adjustment range is 0 ~ 31.
   • The **Clock** adjustment range is -50 ~ +50.

5. Press the **ENTER** button to save.

```
              SCREEN
              Auto Adjust
              Format
              Zoom in/out
              Position
              Manual Adjust ▶   Phase  0
              VCR Mode          Clock  0
              Initialize
              VGA Mode
              MENU  Prev.
```

VCR Mode (TV, Video(Exp.), Video, S-Video and Component 480i mode only)

- Use this function to correct jittering or picture instability while viewing a video tape.

1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **SCREEN** menu.

2. Press the ▶ button and then use ▲ / ▼ button to select **VCR Mode**.

3. Press the ▶ button and then use ▲ / ▼ button to select **Off** or **On**.

   • Select the **On** option if watching a VCR.
   • Select the **Off** option for other equipment. (Except VCR)

4. Press the **ENTER** button to save.

```
              SCREEN
              Auto Adjust
              Format
              Zoom in/out
              Position
              Manual Adjust
              VCR Mode    ▶   √ Off
              Initialize        On
              YNR
              MENU  Prev.
```

Initializing (Reset to original factory value)

- This function operates in every mode.
- Use the Initialize option to reset the adjusted settings.

1. Press the **MENU** button and then use ▲ / ▼ button to select the **SCREEN** menu.

2. Press the ▶ button and then use ▲ / ▼ button to select **Initialize**.

3. Press the ▶ button.

   • You can reset Zoom in/out, Manual Adjust, Position, PIP size, PIP position and sub picture size.

4. Press the **HOME** button to exit.

```
              SCREEN
              Auto Adjust
              Format
              Zoom in/out
              Position
              Manual Adjust
              VCR Mode
              Initialize   ▶   To set
              YNR
              MENU  Prev.
```

Screen Menu Options continued

Luminance Noise Reduction (TV, Video(Exp.), Video, S-Video and Component 480i modes only)

- Use YNR to reduce the picture noise that may appear on the screen.

1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **SCREEN** menu.
2. Press the ▶ button and then use ▲ / ▼ button to select **YNR**.
3. Press the ▶ button and then use ▲ / ▼ button to select **On** or **Off**.
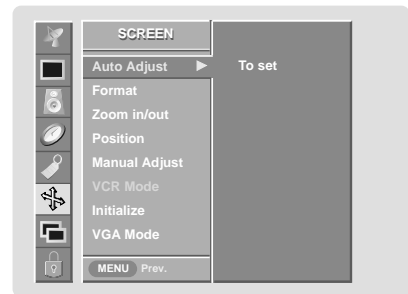4. Press the **ENTER** button to save.

SCREEN	
Auto Adjust	
Format	
Zoom in/out	
Position	
Manual Adjust	
VCR Mode	
Initialize	✓ On
YNR ▶	Off
MENU Prev.	
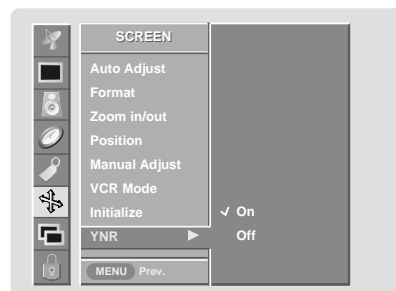
Selecting Wide VGA mode (RGB-PC, DVI-PC mode only)

- To see a normal picture, match the resolution of RGB mode and selection of VGA mode.

1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **SCREEN** menu.
2. Press the ▶ button and then use ▲ / ▼ button to select **VGA mode**.
3. Press the ▶ button and then use ▲ / ▼ button to select the desired VGA resolution.
4. Press the **ENTER** button to save.

SCREEN	
Auto Adjust	
Format	
Zoom in/out	
Position	
Manual Adjust	
VCR Mode	✓ 640x480
Initialize	848x480
VGA Mode ▶	852x480
MENU Prev.	

PIP (Picture-In-Picture) Feature

- PIP lets you view 2 different inputs (sources) on your TV at the same time. One source will be large, and the other source will show a smaller inset image.
- PIP is not available if the **lock on/off** option in **LOCK** menu is set to **On**.
- You can also adjust the PIP features in the PIP menu (Except Swap function).

Watching the PIP

Press the **PIP** button repeatedly to turn PIP on or off.

Swapping the PIP

Press the **EXCH** button to exchange the main and sub pictures.
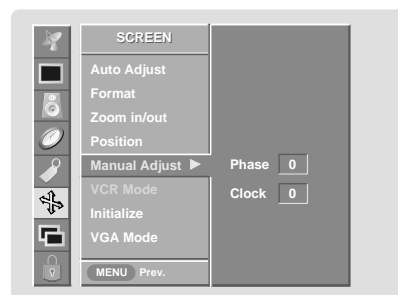
Main Picture   Sub Picture
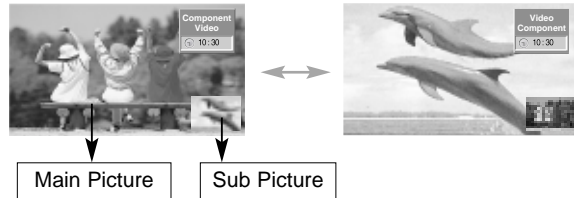
Moving the PIP

1. Press the **TV MENU** Button and then use ▲ / ▼ button to select **PIP** menu.

2. Press the ► button and then use ▲ / ▼ button to select **Win. Position**.

3. Press the ► button and then press the ▲ / ▼ / ◄ / ► button to move the PIP in the desired direction.

4. Press the **HOME** button to exit.

TV Program Selection for PIP

Press the **PIP CH ▲ / PIP CH ▼** button to select a channel for the sub picture in PIP mode.

Selecting an Input Signal Source for the PIP

Use the **PIP DEVICE** button to select the input source for the sub picture.

Main Picture Source	Available Sub Picture Sources
TV	Video (Rear), Video (Front), S-Video, Component 480i/480p/720p/1080i, RGB and MonitorLink
Video (Rear)	TV, Video (Front), S-Video, Component 480i/480p/720p/1080i, RGB and MonitorLink
Video (Front)	TV, Video (Rear), S-Video, Component 480i/480p/720p/1080i, RGB and MonitorLink
S-Video	TV, Video (Rear), Video (Front), Component 480i/480p/720p/1080i, RGB and MonitorLink
Component 480i	TV, Video (Rear), RGB, MonitorLink, Video (Front) and S-Video
Component 480p/720p/1080i	TV, Video (Rear), Video (Front) and S-Video
RGB and MonitorLink	TV, Video (Rear), Video (Front), S-Video, Component 480i

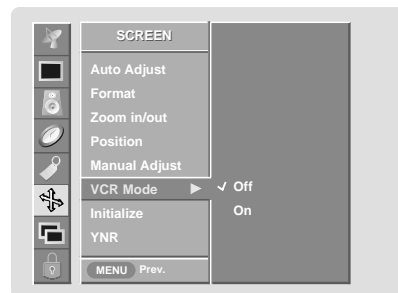## PIP Aspect Ratio

- **To watch 4: 3 or 16:9 aspect ratio for sub picture**

1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **PIP** menu.

2. Press the ► button and then use ▲ / ▼ button to select **PIP Format**.

3. Press the ► button and then use ▲ / ▼ button to select **4:3** or **16:9**.

4. Press the **ENTER** button to save.

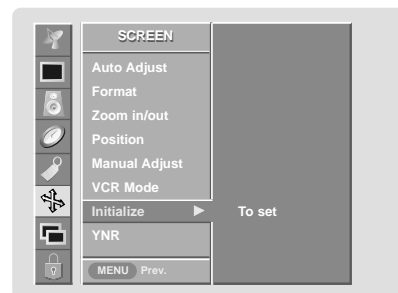|	PIP	
	Device	
	PIP	
	PIP Device	
	Win. size	
	Win. position	
	PIP Format ► √ 4 : 3	
	16 : 9	
	MENU Prev.	
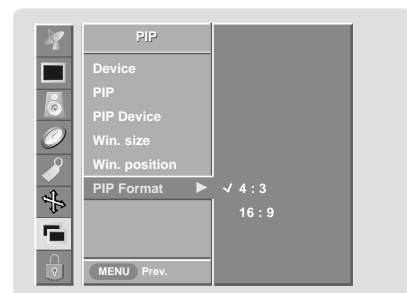
Sub Picture Size Adjustment

1. Press the **TV MENU** button and then use ▲ / ▼ button to select **PIP** menu.

2. Press ► the button and then use ▲ / ▼ button to select Win. Size.

3. Press the ► button and press the ◄ / ► button to change the sub picture size.

4. Press the **HOME** button to exit.

Lock Menu Options

Parental Control can be used to block specific channels, ratings and other viewing sources.
The password will be required to gain access to Parental Control.

The Parental Control Function (V-Chip) is used to block program viewing based on the ratings sent by the broadcasting station. The default setting is to allow all programs to be viewed. Viewing can be blocked by the type of program and by the categories chosen to be blocked. It is also possible to block all program viewing for a time period. To use this function, the following must be set :
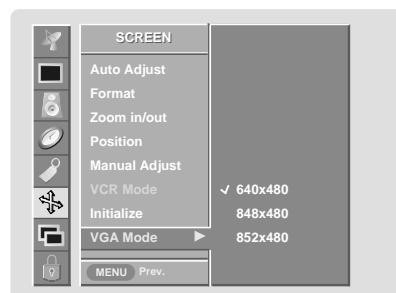   1. Ratings and categories to be blocked.
   2. Specifying a password
   3. Enabling the lock

V-Chip rating and categories
Rating guidelines are provided by broadcasting stations. Most television programs and television movies can be blocked by TV Rating and/or Individual Categories. Movies that have been shown at the theaters or direct-to-video movies use the Movie Rating System (MPAA) only.

For Movies previously shown in theaters:

Movie Ratings :
• Blocking off
• G   (general audience)
• PG   (parental guidance suggested)
• PG-13   (13 years and up)
• R   (restricted)
• NC-17   (18 years and up)
• X   (adult)
If you set PG-13 and Above : G and PG movies will be available , PG-13, R, NC-17 and X will be blocked.

For Television programs including made-for-TV movies :

General TV Ratings :
• Blocking off
• TV-G   (general audience) (individual categories do not apply)
• TV-PG   (parental guidance suggested)
• TV-14   (14 years and up)
• TV-MA   (mature audience)

Children TV Ratings :
• Blocking off
• TV-Y   (youth) (individual content categories do not apply)
• TV-Y7   (youth, 7 years and up)

Content Categories :
• Dialog - sexual dialogue   (applies to TV-PG, TV-14)
• Language - adult language   (applies to TV-PG, TV-14, TV-MA)
• Sex scenes - sexual situations (applies to TV-PG, TV-14, TV-MA)
• Violence   (applies to TV-PG, TV-14, TV-MA)
• F Violence - fantasy violence (applies only to TV-Y7)

Aux.Block Ratings :
• Video (Rear)   (Blocking On/off)
• Video (Front)   (Blocking On/off)
• S-Video   (Blocking On/off)

For Canadian English/French language rating system:

Canadian English language rating system:
• C   (Children)
• C8+   (8 years and up)
• G   (General programming. Suitable for all audiences.)
• PG   (Parental guidance suggested)
• 14+   (Viewer 14 years and up)
• 18+   (Adult programming)

Canadian French language rating system:
• G   (General)
• 8 ans+   (8 years and up)
• 13 ans+   (13 years and up)
• 16 ans+   (16 years and up)
• 18 ans+   (Adults only)

Lock Menu Options continued

Lock Setup

- Select TV, Video (Rear), Video (Front), or S-video input source to use this function.

1. Press the **TV MENU** button and then use ▲ / ▼ button to select the **Lock** menu. Then, press the ► button.

   • If **Lock** is already set, enter the password then requested.
   • The TV is set with the initial password "0-0-0-0".

2. **Setting lock on/off:**

   Press the ▲ / ▼ button to select **Lock on/off**.

   Press the ► button and then use ▲ / ▼ button to select **on** or **off**.

3. **Set password:**

   Press the ▲ / ▼ button to select **Set password**.

   Press the ► button and then enter a four digit password. Enter it again when requested.

4. Press the ▲ / ▼ button to select type of blocking to be set.

5. Press the ► button and then use ▲ / ▼ button to select type of ratings to block.

   • **Age block**, **Content block**, and **Canadian opt.** options, also have sub menus. So repeat step 4 to 5 in the sub menu, to set the types of blocking and rating.

External Control Device Setup

- Connect the MONITORLINK CONTROL/RS-232C input jack to an external control device (such as the Mitsubishi HD-5000 Receiver/Controller or an A/V control system) and control the TV's functions externally.
- Connect the serial port of the control device to the RS-232C jack on the TV back panel.
- RS-232C connection cables are not supplied with the TV.
- NOTE: Not all cables shown are included with the TV. They are available at most consumer electronics stores.

MONITORLINK/RS-232C Setup

(FACTORY INSTALLED)

HD-5000
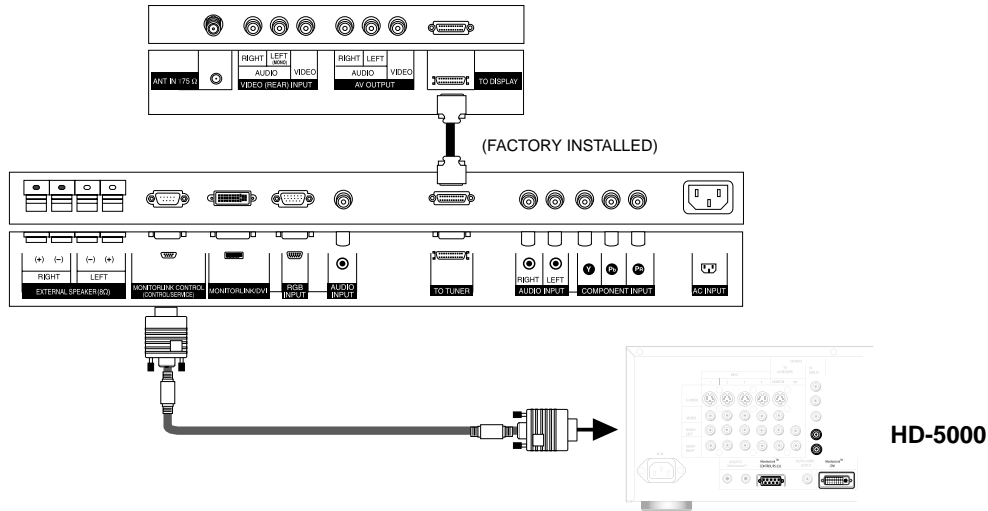
Type of Connector; D-Sub 9-Pin Male

No.	Pin name
1	No connection
2	RXD (Receive data)
3	TXD (Transmit data)
4	DTR (DTE side ready)
5	GND
6	DSR (DCE side ready)
7	RTS (Ready to send)
8	CTS (Clear to send)
9	No Connection
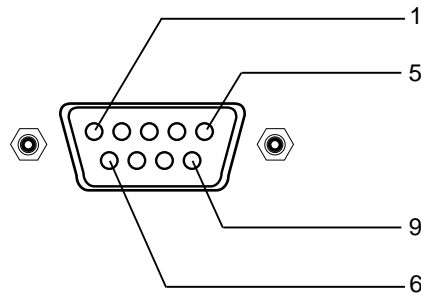
RS-232C Configurations

7-Wire Configurations
(Standard RS-232C cable)

	PC		Plasma TV	
RXD	2		3	TXD
TXD	3		2	RXD
GND	5		5	GND
DTR	4		6	DSR
DSR	6		4	DTR
RTS	7		8	CTS
CTS	8		7	RTS
	D-Sub 9		D-Sub 9	
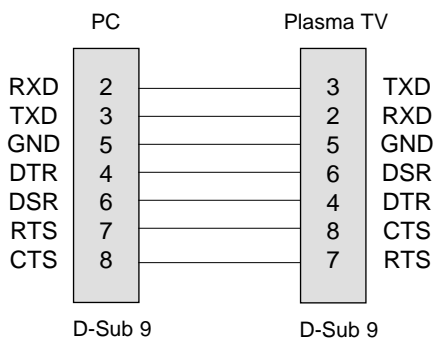
3-Wire Configurations
(Not standard)

	PC		Plasma TV	
RXD	2		3	TXD
TXD	3		2	RXD
GND	5		5	GND
DTR	4		4	DTR
DSR	6		6	DSR
RTS	7		7	RTS
CTS	8		8	CTS
	D-Sub 9		D-Sub 9	
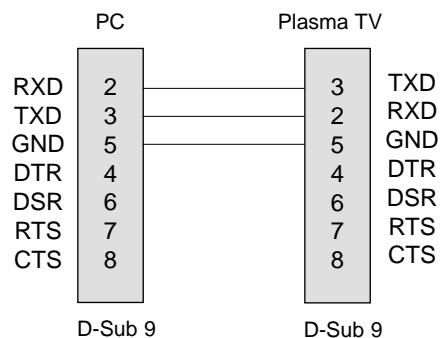
Troubleshooting Checklist

No picture & No sound	• Check whether the TV is turned on. • Power cord inserted into wall outlet? • Test the wall power outlet, plug other product's power cord into the wall outlet where the TV's power cord was plugged in.

Picture OK & No sound	• Press the **VOLUME** (▲) button. • Sound muted? Press **MUTE** button.

The remote control doesn't work	• Check to see if there is any object between the TV and the remote control causing obstruction. • Are batteries installed with correct polarity (+ to +, - to -)? (Refer to p.18) • Install new batteries. (Refer to p.18)

Picture appears slowly after switching on	• This is normal as the image is muted during the startup process of the TV. Please contact your service center, if the picture has not appeared after five minutes.

No or Poor color or Poor picture	• Select **COLOR** in the **PICTURE** menu and press the **VOLUME** (▲) button. (Refer to p.30) • Keep a sufficient distance between the TV and the VCR. • Activate any function to restore the brightness of the picture. (If still picture is on the screen for more than 5 minutes, the screen gets dark.)

Horizontal/vertical bars or picture shaking	• Check for local interference such as an electrical appliance or power tool.

Troubleshooting Checklist continued

No output from one of the speakers	• Adjust **BALANCE** in the **SOUND** menu. (Refer to p.31)

Unusual sound from inside the TV	• A change in ambient humidity or temperature may result in an unusual noise when the TV is turned on or off and does not indicate a fault with the TV.

Lines or streaks in picture	• Check antenna (Change the direction of the antenna).

Poor stereo sound	• Check the kind of input signal and select **Mono**, **Stereo** or **SAP** with the **MTS** button.

Auto programming doesn't stop	• Press the **ENTER** button again.

Picture moves intermittently around the screen	• Is ORBITER ON? Default setting for ORBITER is ON. In this mode, picture moves intermittently around the screen. See page 34 to shut off ORBITER.

Product Specifications

MODEL	PD-4225S	
	TV	TV w/ Speakers & Base
Width (inches)	40 3/4"	49 5/8"
Height (inches)	26"	27 5/8"
Depth (inches)	4 3/8"	10 7/8"
Weight (pounds)	65.2	81.7
Power requirement	AC100-240V ~ 50/60Hz	
Television System	NTSC	
Program Coverage	VHF 2 ~ 13, UHF 14 ~ 69, CATV 1 ~ 125	
Resolution	852 x 480 (Dot)	
Color	16,770,000 (256 steps of each R, G and B)	
Operating Temperature Range	32 ~ 104°F (0 ~ 40°C)	
Operating Humidity Range	Less than 80%	

• The specifications shown above may be changed without notice for quality improvement.

Appendix A: Remote Control Programming Codes

A/V Receivers

Mitsubishi	010, 011, 012, 013,
. .. .	014, 360
Admiral	220
Aiwa	225, 226, 241
B & K	352
Bose.	351
Denon	234, 235, 236, 245,
. .. .	246, 359, 361
Fisher	204
Gerrard	213
Harman Kardon	215, 223, 242, 362
Jensen	223, 229
JVC	232, 233
Kenwood	200, 208, 289
KLH	363
Koss	357
Magnavox	227, 228
Marantz	224, 350, 360
McIntosh	216
Nakamichi	206, 217
Onkyo	209, 214, 240, 247
Optimus.	203, 227, 231, 230
Panasonic	219, 218, 221
Parasound	356
Philips	223, 248, 290
Pioneer	205, 207
Polk Audio	353
Quasar	219, 218, 221
RCA	203, 205, 227, 231, 230
Sansui	203, 211, 239
Sharp	234, 237
Sherwood	354, 355
Sony	222, 249, 364, 365
SoundDesign . .	238
TEAC	212, 213, 210, 211
Technics	221, 218, 219
Venturer.	358
Victor	232, 233
Yamaha	201, 202, 243, 244

Cable Box

ABC	124
Archer	125
Cableview	105
Citizen	122, 105
Color Voice. .. .	128, 129, 130, 106, 107
Comtronics	128, 129, 130 ,106, 107
Curtis	112, 113
Diamond	124, 125
Eagle	129
Eastern	134
GC Brand	105
GE	112, 113
Gemini	122, 143
General Instrument	
/Jerrold	119, 120, 121, 122, 123
. .. .	124, 125, 126, 127
Hamlin	112
Hitachi	103, 124
Macom	103, 104, 105, 108
Magnavox	128, 129, 130, 106, 107
. .. .	133, 138
Memorex	130
Movietime	105
Oak	102
Panasonic	114
Paragon.	117
Philips	128, 129, 130, 106, 107
. .. .	133, 138, 131
Pioneer	101, 116
Pulsar	105
RCA	115
Regal	112
Regency	134
Rembrant	105, 138
Samsung	105
Scientific Atlanta	112, 113, 194
Signature	119, 124, 125, 126, 127,
. .. .	120, 121, 122
SL Mark.	105, 101
Sprucer	105,
Starcom.	119, 124, 125, 126, 127,
. .. .	120, 121, 122
Stargate.	105
Teleview.	101, 105
Tocom	135, 136
Toshiba	104
Unika	125
United Artists . .	102
United Cable . .	119, 124, 125, 126, 127,
. .. .	120, 121, 122
Universal	122
Videoway	106
Viewstar.	129, 130
Zenith/	
Drake Satellite. .	117, 100

DVD Players

Mitsubishi	003
Aiwa	261, 274
Apex	266, 283
Bose.	286
Denon	250, 273
Ferguson	251
GE/RCA/Proscan	251, 256
Harman Kardon	282, 288
Hitachi	270
JVC	257
Kenwood	271, 289
Mintek	285
Next Base	284
Normande	251
Onkyo	267, 280
Oritron	263, 268
Paite.	262
Panasonic	250
Philips/Magnavox	258, 253, 272, 290
Pioneer	252
Saba.	251
Sampo	263
Samsung	261
Sanyo	275
Sharp	260
SMC	275
Sylvania.	264
Sony	254, 278, 279
Thompson	251
Toshiba	253, 287
Venturer.	281
Vialta	277
Wave	269
XWave	269
Yamaha	250, 272, 276, 287
Zenith	259

Appendix A: Remote Control Programming Codes, continued

Satellite Receivers /DBS/DTV

Mitsubishi	
HD/Satellite Receiver	006, 173
Echostar/Dishnetwork	175,82,183,188
Express Vu. .. .	175
GE	176
Gradient . . .	186
Hitachi	173, 181, 184
Hughes	173
Maganavox. .. .	171, 172
Panasonic	174
Philips	171, 172
RCA/Proscan . .	176,179,180,185
Samsung	192
Sony	177
Star Choice . .	173
Toshiba	170, 189, 190,
. .. .	191, 173
Uniden	171, 172
WebTV	187

VCRs

Mitsubishi	001, 002, 060, 067,
068, 061, 062	
Admiral	055
Aiwa	047, 052
Akai	049, 034, 035, 036
Audio Dynamic	031
Bell & Howell .. .	025
Broksonic	040, 046
Canon	043, 045
Citizen	026
Craig.	025, 049, 026
Curtis Mathes .. .	065, 044, 047
Daewoo.	063, 021, 044, 078
DBX	030, 031
Dimensia . . .	065
Emerson	023, 038, 039, 040, 045,
. .. .	046, 062, 063
Fisher	025, 028, 029, 027
Funai	047, 046, 040,054
GE	065, 044, 079, 053
Go Video	057, 069, 070, 071
Goldstar	026
Gradiente	054
Hitachi	043, 065, 020,047
Instant Replay . .	044, 043
Jensen	059
JVC	030,031,054,076,077
Kenwood	030, 026, 031
LXI	047, 026, 020, 027,
. .. .	028, 025, 029
Magnavox	051, 043, 044
Marantz	030, 031
Marta	026
Memorex	044, 029
MGA.	060, 067, 068, 061,
. .. .	062
Minolta	020, 065
Multitech	067, 047, 024
NEC	030, 031, 054
Olympic.	044, 043
Optimus.	048, 041, 055, 026
Orion	046, 040
Panasonic	043, 044, 041, 042

VCRs

Penney	044, 020, 065, 025,
. .. .	030, 031
Pentax	020, 031, 065
Philco	051, 044, 047, 043,
. .. .	046, 040, 063
Philips	051, 043, 044
Pioneer	043
Proscan.	065, 020, 043, 044, 051,
. .. .	066, 021, 022, 053
Quasar	041, 042, 043, 044
Radio Shack .. .	053, 044, 025, 056, 029,
. .. .	060, 047
RCA	053, 065, 020, 043, 044,
. .. .	049,051,066,021,022
Realistic	044, 025, 056, 029, 060,
. .. .	047
Samsung	057, 022, 024, 053
Sansui	046, 040, 072
Sanyo	025, 029
Scott.	021, 022, 024, 029, 060,
. .. .	067, 068, 046, 040
Sears	025,026,027,028,020
Shaintom	037
Sharp	055, 056
Signature 2000	047, 055
Singer	037
Sony.	048, 049, 050, 073, 074,
. .. .	075
SV2000	047
Sylvania.	051, 043, 044, 047
Symphonic. .. .	047
Tashiro	026
Tatung	030, 031
TEAC	030, 047, 031
Technics	041, 042, 043, 044
Teknika	044, 047, 032
Toshiba	021
Totevision	026
Vector Research	031
Wards	055,056,029,064,026
Yamaha	025, 030, 031
Zenith	064,026

Notes

Notes

Mitsubishi Plasma Display Panel Limited Warranty

MITSUBISHI DIGITAL ELECTRONICS AMERICA, INC. ("MDEA") warrants to the original purchaser of this Plasma Display Panel that if purchased from an authorized MITSUBISHI Audio/Video Dealer, should it prove defective by reason of improper workmanship and/or material:

a. Parts. All parts are warranted for a period of one year from the date of the original purchase at retail. We will repair or replace, at our option, any defective part without charge for the part. Parts used for replacement may be replaced with those of like kind and quality and may be new or remanufactured. Parts used for replacement are warranted for the remainder of the original warranty period.

b. Labor. We will provide the labor for a warranty repair by an authorized MITSUBISHI service center without charge for one year from the original date of purchase at retail.

c. Notice. To obtain warranty service, you must notify an authorized MITSUBISHI service center of any defect within the applicable warranty time period.

1. TO OBTAIN WARRANTY SERVICE:

a. Contact your nearest authorized MITSUBISHI service center, whose name and address can be obtained from your MITSUBISHI dealer or by writing or calling MDEA at the address and telephone number provided below.

b. Warranty service will be provided in your home or, if required, at an authorized MITSUBISHI service center, provided that your television is located within the geographic territory customarily covered by an authorized MITSUBISHI service center. If not, you must either deliver your television to an authorized service location at your own expense, or pay for any travel and/or transportation costs the service center may charge to and from your home. Actual service labor will be provided without charge.

c. Proof of purchase date from an authorized MITSUBISHI dealer is required when requesting warranty service. Present your sales receipt or other document which establishes proof and date of purchase. THE RETURN OF THE OWNER REGISTRATION CARD IS NOT A CONDITION OF WARRANTY COVERAGE. However, please return the Owner Registration Card so that we can contact you should a question of safety arise which could affect you.

3. This Plasma Display Panel uses a revolutionary technology, gas plasma, to create the screen image. This technology creates the image using small dots, or picture elements (pixels). Your Plasma Display Panel is manufactured to a high level of perfection, in fact, 99.99% perfect in the number of properly functioning. As in tube television, sometimes a pixel is continuously active or inactive. Our standard is clear, your pixels must be 99.99% perfect in the number of properly functioning pixels.

4. THIS WARRANTY DOES NOT COVER:

a. ....Up to .01% pixel outages (small dot picture elements that are dark or incorrectly illuminated).

b. ....Cosmetic damage or damage to this Plasma Display Panel or to any other products where such damage is caused by unauthorized modification, alteration, repairs to or service of the product by anyone other than an authorized MITSUBISHI service center; physical abuse to or misuse of the product (including any failure to carry out any maintenance as described in the Owner's Guide or any product damaged by excessive physical or electrical stress); any products that have had a serial number or any part thereof altered, defaced or removed; product use in any manner contrary to the Owner's Guide (including, but not limited to, uneven phosphor aging and imprinted images on the viewing screen); freight damage or damage due to improper shipping methods; damage caused by use of third party mounting brackets or stands or any damage caused by acts of God or other factors beyond the reasonable control of MDEA, such as power surge damage caused by electrical system or lightning. This warranty also excludes service calls where no defect in the product covered under this warranty is found, service calls related to unsatisfactory audio or visual reception or signal unless caused by a defect in the product that is covered under this warranty, all costs, expenses or any other damages arising from product installation, or set-ups, any adjustments of user controls (including, contrast, brightness, color, tint, fine tuning, sharpness), other adjustment necessary to prepare the unit for display or use, connection with any external TV tuner, audio receiver, antenna, cable or satellite systems, or service of products purchased or serviced outside the U.S.A. Please consult the operating instructions contained in the Owner's Guide furnished with the product for information regarding user controls.

5. ANY EXPRESS WARRANTY NOT PROVIDED HEREIN, AND ANY REMEDY WHICH, BUT FOR THIS PROVISION, MIGHT ARISE BY IMPLICATION OR OPERATION OF LAW, IS HEREBY EXCLUDED AND DISCLAIMED. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE ARE EXPRESSLY LIMITED TO A TERM OF ONE YEAR.

6. UNDER NO CIRCUMSTANCES SHALL MDEA BE LIABLE TO PURCHASER OR ANY OTHER PERSON FOR ANY INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES, WHETHER ARISING OUT OF BREACH OF WARRANTY, BREACH OF CONTRACT, OR OTHERWISE.

7. Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental, special or consequential damages, so the above limitations or exclusions may not apply to you.

8. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

9. BEFORE REQUESTING SERVICE, please review the instruction booklet to insure proper installation and correct customer control adjustment. If the problem persists, contact your nearest MITSUBISHI Dealer for the name(s) of authorized MITSUBISHI Service Center(s). If you are unable to obtain this information, please call 800-332-2119, or write us at the address below.

MITSUBISHI DIGITAL ELECTRONICS AMERICA, INC.
9351 Jeronimo Road
Irvine, CA 92618-1904